

Chapter 8

And Yet Spatial Disparity Is a Problem of Capitalism: Leftist Approaches in a Post-Fordist World

As presented above, the issue of spatial disparity was put at the forefront of mainstream social studies in capitalist countries during the Cold War. In related investigations the United States was at the leading edge of theoretical innovation without a doubt. Due to the manifold changes in the overall political, economic, and social context, however, the topic gradually lost its exclusive position in research agendas from the 1970s onwards. After the neoliberal turn, in the eyes of many, spatial inequality is no longer a “problem” to be “handled”. Meanwhile, the European Union witnessed a different tendency: the attention given to spatial inequalities did not decrease but considerably increased here because of the remarkable economic disparities possibly posing a threat to political stability in the integration. Still, related research in Europe also remained within the theoretical framework offered by state-of-the-art theories of US origin, which mostly did nothing but integrate already accessible concepts to a neoclassical mindset and “language”. Thus, even the most cited and most “visible” researches in Europe dominantly did not go beyond description and left untouched the factors leading to either convergence or divergence.

In the political sense both approaches distanced themselves from their postwar predecessors. The different ability of capitalism and socialism to produce or reduce spatial inequality was as a question exiled from the research agenda. After the neoliberal turn, in mainstream approaches both in North America and in Europe the topic was only investigated for a capitalist framework. These features of the post-Fordist research practice, however, opened a door for leftist ideologies to bring spatial inequality back among their main research issues in order to justify their political objectives. Once re-problematizing spatial disparity from an anti-capitalist point of view, these inequalities could again be presented as proofs of the unjust nature of capitalism and of the necessity to prefer socialist principles in economic management. This was on the one hand suggested by (neo-)Marxist¹ *dependency*

¹ In the literature the term “neo-Marxist” is used in many different meanings. A common point of ideas called “neo-Marxist” is that in a certain view they are all “new” compared to “old”, thus,

theories, which could rely on some ideas from earlier Western concepts that had been critical to the US dominated world order. Works of the latter sort had already been present in the 1950s and 1960s, although they had been located at the periphery of social scientific thought, with virtually no influence on mainstream approaches in the “most developed” Western countries. On the other hand, the re-emerging theory of *uneven geographical development* also opened up new vistas for an anti-capitalist interpretation of spatial inequalities. In the next sections we will focus on these two streams, not only dealing with their actual ideas having mushroomed since the 1970s but also presenting their forerunners, based on which the post-Fordist boom of leftist ideas could take place.

8.1 Global Inequality as a Product of the World Order: The Way to Dependency Theories²

8.1.1 *A Lonely but Hard Marxist Opinion from the West: Paul Baran’s View About Global Inequalities*

In fact, the old Marxist view that spatial inequality can be regarded as an “obvious” imprint of the immorality and unsustainability of capitalism (see Chap. 5) was

traditional Marxist concepts. The nature of this newness can be manifold. First, it can refer to *conceptual* (and methodological) *innovations*. “Neo-Marxism” in this sense means the formulation of new hypotheses and the introduction of new research methods to come to terms with new economic and social phenomena the old “mainstream Marxism” fails to explain or even to perceive. An example for this was the early twentieth century “neo-Marxism”. This tried to conceptualize global capitalism, which mirrored international relations profoundly different at that time than during the life of Marx, bringing into being the theory of imperialism (see Blomström and Hettne 1984, p. 53; also cf. Sweezy 1972). Second, “neo-Marxism” can and in dependency research does stand for approaches being new relative to the “traditionally” Europe-centric Marxism since they mirror a “new”, *non-Europe-centric* point of view. In this sense, “neo-Marxism” differs from “traditional” Marxism in observing processes from the global periphery, redefining a Europe-centric definition of the class to meet real conditions in “underdeveloped” countries, putting stress on the importance of guerrilla warfare instead of organized struggle of labor movements, and paying attention to the “exploitation of nature”, to ecological problems occurring in the global periphery (cf. Blomström and Hettne 1984, pp. 36–38). Third, the prefix “neo” is often attributed to Marxist concepts which have emerged since the late 1960s (mainly since the 1968 student movements), thus, after the postwar decades when Marxism in the Western world had mostly been considered as identical with Soviet communism and was pushed to the periphery of philosophical thought. Here the newness was constituted by a new heyday of Marxist theories, mostly concentrated around the so-called *New Left Marxism* (cf. Fine 2001). To avoid possible misunderstandings and ambiguities, in the text we tendentially use “neo-Marxism” in the second meaning, where it refers to a non-Europe-centric point of view.

² We agree with Blomström and Hettne (1984) in that the term “dependency theory” in singular is “unsuitable”, since there is no single dependency theory. Instead, “a number of different dependency theorists have received their theoretical impulses from different sources” (p. 77). We also

mainly taken in the postwar period by Soviet theoreticians for apparent geopolitical reasons. Still, the concept had not absolutely been absent in Western thought in the same period. The US Marxist economist Paul Baran based his work *The Political Economy of Growth* (Baran 1957) on the same idea, in which he presented global economic inequalities as a product of the capitalist order. For him, the “underdevelopment” of certain countries was under capitalist circumstances a necessary concomitant of the “development” in others. Thus, he suggested that it was an inherent feature of capitalism to increase global disparities, a tendency which was impossible to end before capitalism would be swept away.

In Baran’s view, the existing world order was that of monopoly capitalism instead of laissez-faire capitalism. For him, the lack of sufficient competition freed capitalists from the stress constituted by the fierce competition with rivals, and for this reason they were not forced to produce as much value-added as it would have been technically possible. In consequence, they invested less than potentially possible for two reasons. Baran claimed on the one hand that beyond a point a capitalist could realize very few or virtually no additional profit through additional investment in the branch already dominated by him/her. Instead, due to the lack of efficient rivals, he/she could actually take advantage of his/her dominating position and realize the same profit without new investment. On the other hand, it made no sense to invest in other branches since these were likewise monopolized by other capitalists, who seemed impossible to compete with efficiently. Hence, in Baran’s eyes, capitalists invested less and, consequently, created less jobs in their native countries than they could, so a situation of “underinvestment” emerged.

There was still a need, however, for creating additional possibilities of investment for two reasons. First, capitalists had a firm interest in not leaving their capital “unused” but to invest it in order to realize more and more profit. Second, the relative shortage of workplaces and the significant unemployment as its result might have led to social unrest, so it seemed politically dangerous. In consequence, capitalists created new possibilities to invest through artificially generated state armament and through “opening up” “underdeveloped” countries formerly untouched by capitalism. The latter was, however, an imbalanced process in Baran’s view. His opinion was that capitalists only invested in “underdeveloped” countries in activities supplying products to be exported to “developed” countries, not to be consumed by local inhabitants. Furthermore, he claimed that all the value-added created in the “underdeveloped” countries was siphoned off and pumped into the “developed” areas. In this interpretation, investment in and exploitation of the “underdeveloped” countries only served the goal for which it was a necessary

resist, however, using “dependency school”, the version the two authors prefer. This formulation may lead to misunderstandings in our view as dependency theorists were not all the members of a singular academic “school”, which is usually based on regular personal contact and a direct master-disciple relationship. In fact, such a link existed between several dependency theorists, but certainly not between all of them. Instead the main similarity was rather in the way all of them tried to interpret the world, and in the mental schemes they used to conceptualize social, economic and political phenomena.

prerequisite: to promote growth in “developed” areas. Thus, the global capitalist order was presented here as a huge zero-sum game, where “underdeveloped” countries unavoidably lost and spatial disparities increased and increased as capitalism developed. In the light of these claims, Baran saw the only option for the “underdeveloped” world to exit the capitalist world order and to convert to socialism. As he put it: “The establishment of a socialist planned economy is an essential, indeed indispensable, condition for the attainment of economic and social progress in underdeveloped countries.” (p. 261).

To sum it up, Baran defined and used the *problem* of global spatial inequalities as a rhetorical means to reveal the claimed nature of capitalism, which for him was inherently unjust and parasitic. He also presented this view as a reasonable point for urging “underdeveloped” countries to break with capitalism and to become socialist, thus, to realize the author’s leftist vision. Baran used here arguments essentially very similar not only to those of Lenin (see Sect. 5.3), but also to those of Stalin (see Sect. 5.4). Furthermore, Baran put great emphasis on presenting not only socialism as an abstract category but existing socialism in the Soviet Bloc as well as something fundamentally positive. Although the fact of waves of political purges and the physical destruction of tens of millions could not be denied, Baran gave an interpretation in which these tragedies were presented either as independent from the socialist notion itself or as tolerable under given circumstances. On the one hand, he argued that such events only resulted from the “cult of personality” and the acting of some “evil personalities” (p. viii) such as Joseph Stalin and Lavrentiy Beria, the head of Soviet state security. Hence, Baran had the opinion that “it is a grievous fallacy to conclude from this that *socialism* is the ‘entire system’ that needs to be repudiated” (emphasis in original; *ibid.*) since “socialism is inherently [not] a system of terror and repression” (*ibid.*). On the other hand, Baran argued that “the ascent of reason has never followed a straight line” and that “errors are . . . unavoidable in all human endeavors” (p. 298). It was for him especially so in a case where it was crucial “to develop at breakneck speed a backward country”, which, moreover, was “threatened by foreign aggression” and “internal resistance” (p. viii). By this, the responsibility for communist terror in the USSR was simply attributed to the aggression of Hitler’s Nazi Reich, the threat from the enemy capitalist world, the historical “backwardness” of the post-revolutionary Russian Empire, and “internal resistance”, but not to inherent features of Soviet-type socialism.

Moreover, Baran did not stop at this point in freeing Soviet communism from the burden of its moral guilt. He even tried to present this system as superior to capitalism. Fully in line with then typical USSR propaganda,³ Baran claimed that socialism only had “errors”, resulting from “an inadequacy of knowledge and insight”, from which “it will progressively free itself” (p. 299). The weaknesses of capitalism were, however, presented as “irrationality”, “*inherent* in the structure of society” (emphasis in original; *ibid.*), and, consequently, not to be cured. In other

³ Cf. the concept of Kozlovskiy (1954) presented in Sect. 7.1.2.

words, Baran used the old and well-tested discursive strategy to “individualize” the shortcomings in the favored (socialist) system (thus, to consider these as but some wrong decisions of some individuals), while “generalizing” the problems in the rival, capitalist community (by claiming them to be inherent to the system) (cf. Meusburger 2005). No wonder that Baran’s work received virtually no acknowledgment in mainstream US theory-making of its day, since it strongly opposed American geopolitical interests in the Cold War and was instead in line with Soviet endeavors. In consequence, it remained “a voice crying in the wilderness” (Harrison 1988, p. 75; quoted in Gonçalves 2005, p. 43).

8.1.2 Leftist Theories to Question the US Dominated World Order by Analyzing Global Disparities: The ECLA Structuralist Approach in Latin America

In the 1950s Baran’s Marxist concept was indeed a curiosity in Western theory-making. This did not mean, however, a total lack of theories questioning the capability and willingness of the United States to handle the challenge posed by global disparities. Some authors actually tended to reject that the US dominated world order would automatically solve the problem, yet they did not argue against the whole capitalist system and found that global inequalities could be reduced through measures compatible with capitalism. The first of them was the Argentine economist Raúl Prebisch, director of the UN Economic Commission for Latin America (ECLA; also CEPAL after its Spanish name Comisión Económica para América Latina) after 1948. Prebisch developed a concept (Prebisch 1950) for which “underdevelopment” in peripheral countries was “the result of a specific process that led to underdevelopment in one part of the world and development in another” (Blomström and Hettne 1984, p. 43).

As Gonçalves (2005, pp. 52–53) shows, this presumption was based on the rejection of the neoclassical general equilibrium model of international trade. Prebisch and his team rather thought that international trade was one of disequilibrium, beneficial for some and detrimental for others. Their opinion was that intensifying global trade, if taking place under uncontrolled laissez-faire circumstances, led to more and more imbalanced terms of trade (in other words, more and more unequal exchange) between the “developed” and “underdeveloped” world, thus, to growing global inequalities. The underlying presumption was that increasing productivity in the “developed” countries did not result in shrinking prices of the goods produced in global centers. Instead, producers were expected to try and take advantage of their special situation due to monopolistic competition and maintain price levels despite shrinking production costs in order to realize surplus benefit. In this attempt they were only challenged by labor unions, which were organized well enough to let a considerable part of surplus benefit be re-allocated in order to increase the wages of workers.

Meanwhile, Prebisch thought that increasing production in the center resulted in intensifying competition on the peripheries supplying raw materials for the centers. In his view, since many “underdeveloped” countries strongly depended on revenues from the export of primary goods, they were in a fierce competition with each other to find new consumers for their products. Thus, increasing production in the center ended up in increasing competition in the periphery, due to which prices for primary goods decreased.⁴ And, given a constant price level for manufactured goods and decreasing prices for raw materials, the actual form of the international division of labor seemed to raise global inequalities unavoidably.

Until this point Prebisch’s thoughts were remarkably compatible with the concept of circular causation, an idea developed by Myrdal as director of another Economic Commission of the United Nations, located in Europe. And the similarities did not end here. Just as Myrdal, apparently influenced by Keynesian views, claimed the necessity of state intervention to countervail tendencies of polarization, Prebisch also identified state policy as a possible means to cope with divergence. For him, import substitution industrialization and the protection of local production by tariff barriers was the strategy to put an end to unequal exchange and global polarization.

In fact, the concept of Prebisch was not a Marxist but rather a Keynesian one. Just as Myrdal, he not only rejected *laissez-faire* trade but socialist planning as well. In the words of Blomström and Hettne (1984), Prebisch “did not propose a planned economy. The Russian model was as rigorously rejected as the *laissez-faire* model. The market economy was to remain, but under the ‘surveillance’ of the government” (emphasis in original; p. 44). Still, although Myrdal’s work became a theoretical cornerstone of spatial disparity research, the somewhat earlier concept of Prebisch was kept outside the domain of mainstream theories. This happened in spite of the fact that both authors held high positions in UN institutions with analytical and policy-aiding objectives, which without a doubt gave a strong legitimate authority to their findings and views.

To understand the reason for the different reception of the two concepts, one should take a closer look at their geopolitical implications. As we have already explained in Sect. 6.7.1, Myrdal carefully balanced between two strands. On the one hand, he blamed the colonial past for all international and intranational disparities the poor countries suffered from. On the other, he stressed not the similarities but the differences between the former colonial powers and the United States, while presenting the latter in a positive light with regard to its claimed endeavor to reduce spatial inequalities. Thus, Myrdal’s work efficiently contributed to a positive image of the American superpower. But the same was not true in

⁴The claimed concept about constant prices for manufactured goods produced in global centers and sinking prices for raw materials provided by the global periphery gained support from another UN economist, the American Hans Singer (1950). His calculations were in concert with Prebisch’s suggestion, although there was no direct exchange of ideas between the two researchers (Love 1980). Due to this, the theory we have presented in the text is often called the Singer-Prebisch thesis.

Prebisch's concept. In fact, his opinion about the global role of the United States was rather negative. In the words of Preston (1996): "the ECLA analysis of the situation of the peripheries in relation to the new metropolitan centre of the USA was pessimistic in that the new centre was seen to be both powerful and unsympathetic" (p. 185). For Prebisch, the solution compatible with capitalism to hinder further spatial polarization was not to deepen *laissez-faire* trade with the United States. Instead, he suggested that countries on the periphery (especially in Central and South America) had to reduce such interaction and instead stand on their own feet. This idea obviously did not fit into American geopolitical interests, even if many governments in South America found Prebisch's concept attractive and tried to put it into practice during the late 1950s and early 1960s (for the latter information see Gonçalves 2005, pp. 54–55).

The ideas of Prebisch opened the way for further concepts as well, which "radicalized" (Blomström and Hettne 1984, p. 64) dependency theory. Their central argument was that social changes in peripheral countries were also necessary to get rid of the structures sustaining and permanently intensifying disparities between center and periphery. The Brazilian economist Celso Furtado, also a member of staff in ECLA, underscored the role of social structures inherited from the colonial past in global polarization. In his concept with strong historical grounding, he stressed that the economic growth path of Brazil and the United States began to diverge as early as the first part of the nineteenth century due to cultural factors. In his view, the Portuguese and Spanish colonization imported from the colonial centers to Central and South America a much more centralized and rigid institutional framework than the British model spread over the northern part of the continent. This was for Furtado the main reason for the relative lack of flexibility in nineteenth century Brazil, Argentina etc. to adapt their export structures to changing global demand, a task the United States successfully accomplished. But he did not simply blame the different colonial heritages for disparities within America.

A similarly decisive problem was in Furtado's eyes that "the great disparities in the behavior of the ruling classes" (Furtado 1963, p. 32) and related institutional structures proved highly persistent over time. For him, the strongly centralized state apparatus typical in the countries of Central and South America maintained a system where resources were distributed by the central power for political loyalty. The mechanism mostly benefited an extremely small and heterogeneous fraction of the population basically constituted by landlords and influential merchants. This stratum, "holding the monopoly of power unchallenged" was in fact "composed of various groups of interests", especially in an economic sense, which actually made them "unable to form a plan for national developments" (Furtado 1965, p. 68). Interestingly, Furtado emphasized that these structures were responsible not only for growing disparities between the United States and Brazil, but also for those between the Brazilian regions (see Furtado 1963). Thus, Furtado interpreted vast and increasing inequalities at various geographical levels in a structuralist way.

For a possible solution, Furtado argued for a state-led reorganization of the economy and a remarkable shift in the distribution of income among local

inhabitants to break down the power monopoly of the oligarchs. In his eyes this was the only way out of the vicious circle of “underdevelopment” and increasing spatial inequalities both in international and intranational senses.⁵ In terms of politics, Furtado’s views went beyond those of Prebisch insofar as they urged for social changes in Central and South America. Yet, as Brookfield (1975) underscores, Furtado was neither a pure Marxist nor an advocate of socialist revolution, but rather a person influenced by Marxist as well as liberal concepts (even if he was explicitly leftist—cf. Furtado 1965, p. xiii). As Gonçalves (2005, p. 59) emphasizes, the same was true for Furtado’s Chilean fellow Osvaldo Sunkel, who saw the roots of “underdevelopment” on the American periphery basically in the same factors as Furtado. Still, similarly to Furtado, he did not argue for a socialist revolution, which he otherwise regarded as “a very improbable historical event in the near future in Latin America” (Sunkel 1969, p. 32). Instead, he suggested that the necessary social changes also urged by Furtado could be carried out on the basis of cooperation of the middle and lower classes under the aegis of intensifying nationalism and without sweeping away the existing economic order.

The question to what extent “development” in Central and South American depended on external effects from the global centers was investigated by the Brazilian sociologist Henrique Cardoso and the Chilean historian Enzo Faletto as well. These two authors worked for ILPES (Instituto Latinoamericano y del Caribe de Planificación Económica y Social; Latin American and Caribbean Institute for Economic and Social Planning), a subordinate institution of ECLA (see Gonçalves 2005, p. 60). Cardoso and Faletto took into consideration both the concepts of Prebisch and those of Furtado and Sunkel about the reasons for “underdevelopment” in Central and South America. But between the ideas blaming either external dependency or inner social structure as the ultimate root of the problem, Cardoso and Faletto (1969, 1979)⁶ tended to prefer an explanation in between.

The two authors explicitly wanted to “avoid the two fallacies frequently found” in related concepts, namely the “belief that the internal or national socio-political situation is mechanically conditioned by external dominance” as well as “the opposite idea that all is due to historical contingency” (Cardoso and Faletto 1979, p. 173). In other words, they had the opinion that there were “structural limits to possible action” (ibid.), but a certain room for maneuver still existed so thus “the relation of dependence does not mean that national history in dependent nations will simply reflect changes in the external hegemonic center” (ibid.). For this reason, they argued for a “dependent development” (p. xxii) to exist in countries in the periphery, where “structural links” between “external and internal forces . . . are rooted in coincidences of interests between local dominant classes and

⁵The above mentioned ideas of Furtado appear in many of the books and papers he wrote. For a detailed overview of the related literature and the temporal development of Furtado’s views see Boianovsky (2009).

⁶The two works were generally the same since the 1979 book was the first (otherwise expanded and amended) English edition of the 1969 essay *Dependency and Development in Latin America*.

international ones, and, on the other side, are challenged by local dominated groups and classes” (p. xvi).

To sum it up, Cardoso and Faletto broke with identifying either external dependency or social structure in the dependent countries as an exclusive (or at least dominant) reason for their “underdevelopment”. Instead, they stressed that both factors were important, and that the level of “development” on the periphery was an outcome of the summarized effect of the two factors. By this view the two authors also gave ammunition for leftist political notions aimed at social changes, but not radical ones. They agreed that “external factors” (mostly manifest in the activity of international companies settled in the global periphery) as well as “internal” ones (e.g. social and institutional structures) were responsible to some extent for international inequalities in favor of the global center. Hence, their words (at least implicitly) justified import substitution industrialization as well as attempts to erode the power of the ruling class in dependent countries. In the meantime, however, their concept basically mirrored the willingness to understand phenomena instead of setting clear political goals. Cardoso and Faletto actually analyzed the chances of promoting faster “development” in Latin America, but without saying what to do exactly. Even what can be considered as an implicit suggestion in their concept merely gave justification for already existing political steps (such as import substitution industrialization) instead of calling for radical changes.

To sum it up, representatives of the structuralist approach intensively dealt with global disparities as a major problem for the “underdeveloped” countries in general, and for Central and South America in particular. Their views about the relative importance of external dependence and inner social structures were somewhat different, but the geopolitical meaning of what they said was apparently barely compatible with the foreign political interests of the United States. The limitation of laissez-faire trade through tariffs and a decrease in the reliance on industrial imports through industrialization were objectives contrary to American aims. Furthermore, the attempt in dependent countries to reduce the unchallenged power of the ruling class was also questionable to be fully in line with US interests. This was because, as several structuralist authors underscored, local oligarchs in peripheral countries usually tended to have the same economic interests as foreign investors and merchants did. In consequence, to undertake changes in the social structure could have been detrimental in a US view. For these reasons, concepts of the structuralist approach in Latin America received virtually no attention from mainstream US theories about spatial disparities. Yet, these structuralist concepts were free from extreme anti-capitalism. They neither envisaged the necessity of thorough political changes nor did they use the issue of global disparities as a means to take advantage in order to justify radical political goals. These were, however, also done soon by other authors.

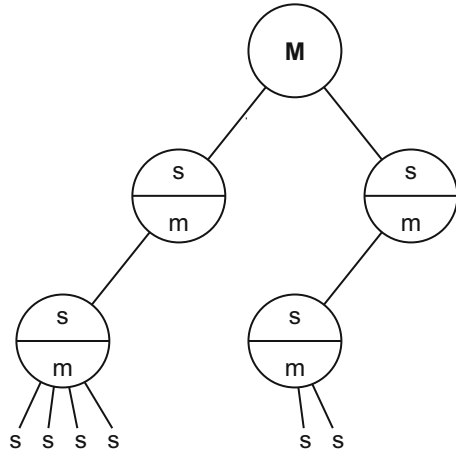
8.1.3 Analyzing Global Disparities to Predict or Urge for the End of Capitalism: Neo-Marxist Dependency Theories and the World-System Model of Immanuel Wallerstein

As we have presented in the last section, the representatives of the structuralist approach in Latin America provided concepts from as early as the 1950s onwards that pointed at the link between large and increasing spatial disparities and the political power relations both at the international and local levels. They also suggested (either explicitly or implicitly) certain changes in economy and society in order to hinder further polarization. Still, these concepts did not challenge the fundamental basis of capitalism. After the late 1960s, however, this also happened. Especially in the light of the 1964 military coup d'état in Brazil many came to the conclusion that protectionism and import substitution industrialization, which the ECLA structuralists had argued for, failed in solving the problem of "underdevelopment" in Latin America. This indicated in the eyes of many that steps taken on the global periphery against external exploitation were impossible to reach their objectives without questioning and changing the ultimate foundations of the capitalist order.

The Brazilian sociologist and economist Theotonio dos Santos argued that import substitution necessarily ended in doom since mechanisms responsible for global dependency were intrinsic to capitalism. Hence, for him, policy measures along ECLA suggestions were only to substitute traditional links of dependency with "the New Dependence", where multinational companies headquartered in the global center played a key role in sustaining the exploitation of the periphery (Dos Santos 1970, 1973). Dos Santos had the opinion that asymmetric power structures and resulting international disparities could only be changed by putting an end to capitalism. This meant in his interpretation either the establishment of a nationalistic military regime (as happened in Brazil) or a revolutionary, socialist one (as began in Allende's Chile) (cf. Dos Santos 1969). In this dualistic approach it was of course no question that dos Santos found the second option desirable.

The idea that global dependency and inequality were directly brought into being by capitalism was central to the works of the Brazilian sociologist and economist Ruy Mauro Marini (1965, 1969, 1973) as well. He distinguished between two forms of capitalism. In his view, capitalism in the global center was different to what he called "dependent" or "peripheral capitalism". The latter was aimed at providing cheap exports to the center. For this reason, local wages on the periphery were kept low, and attempts to cover the needs of local inhabitants were neglected due to the low purchase power these had. Marini thought that the whole structure of peripheral capitalism served the exploitation of "underdeveloped" countries by the "developed" ones. This was in his eyes a necessary prerequisite for a high level of well-being in the global center. Thus, Marini also saw the ultimate reason for global

Fig. 8.1 Frank's metropolis-satellite model. Adapted from Blomström and Hettne (1988), p. 69. *M* the world metropolis, *m* metropolis, *s* satellite



disparities in the structures of dependency, which he considered to be unavoidable concomitants of capitalism.⁷

Unquestionably influenced by the Cuban Revolution and the revolutionary wave sweeping through Latin America, some radical authors went even further in presenting growing spatial inequalities as quasi a *casus belli* to justify radical attempts against the capitalist order. A main representative of them was the German-born US economist André Gunder Frank. Frank (1967), working in Latin America from the early 1960s and strongly influenced by Paul Baran (see Gonçalves 2005; p. 63), went back in his concept to the structuralists' idea which he summarized as follows: "economic development and underdevelopment are the opposite faces of the same coin" (Frank 1967, p. 9). By this, he pointed out the decisive role of international dependence in the "underdevelopment" of peripheral countries, tracing back the problem of disparities to external causes. In Frank's view, the whole world could be interpreted as a group of "metropolises" and "satellites", forming a hierarchical structure. For him, this structure was much more sophisticated than the dual system presented by Prebisch and his followers. Frank's model was a "chain-like" one, formed by a dense net of links of "the capitalist world and national metropolises to the regional centers . . . and from these to local centers, and so on" (p. 7), to local actors in social and economic life. In this interpretation, each entity between the uppermost and lowest levels was considered as both a metropolis and a satellite: it was a metropolis relative to entities at lower levels, but a satellite for metropolises at higher levels (Fig. 8.1). Ultimate satellites were thought to be found only at the individual level, for instance among landless laborers. Meanwhile, Frank presented the United States as the "absolute" metropolis at the top of the global hierarchy. For Frank, hierarchical links in the model also

⁷The two paragraphs on the scientific works of dos Santos and Marini are mainly based on Blomström and Hettne (1984), pp. 64–66.

represented the links of exploitation, which suggested that disparities between metropolises and satellites were necessary to grow.

In fact, these ideas were not fundamentally new compared to structuralist concepts described in the previous section of our essay. But Frank went even further: he claimed a direct, causal link between capitalism and spatial inequalities, suggesting that the reduction of these disparities was impossible within the actual economic framework. As he put it, “it is capitalism, both world and national, which produced underdevelopment in the past and still generates underdevelopment in the present” (p. vii). Or, in other words: “underdevelopment as we know it today, and economic development as well, are the simultaneous and related products of the development on a world-wide scale and over a history of more than four centuries at least of a single integrated economic system: capitalism” (Frank 1975, p. 43). And Frank indeed considered capitalism to be responsible for spatial inequalities at *all* geographical levels. In the light of the hierarchy he described in his satellite/metropolis model, he was convinced that “the colonialist-imperialist manifestations of capitalism occur not only between countries but equally so within countries” (p. 72). Hence, “at each point, the international, national, and local capitalist system generates economic development for the few and underdevelopment for the many” (Frank 1967, p. 7).

Moreover, Frank firmly believed that these shortcomings of capitalism could not be handled, that the economic order was not be “mended”. For him, the tendency to generate spatial inequalities was a direct outcome of “capitalism’s essential internal contradiction” (Frank 1969, p. 227). This meant that capitalism could not be expected to bring “development” to the periphery in the future and an equalization of spatial disparities. In Frank’s words: “For the system which has produced and continues to produce both development and underdevelopment . . . it is not by its very nature able to produce development only” (Frank 1975, p. 51). It was for this reason that in his eyes “so far, no national, or other sector of the world capitalist system, once underdeveloped, has been able to escape from underdevelopment and still preserve capitalist productive relations” (p. 102). Hence, the reduction of disparities in space and a “real development” in the periphery was considered to be possible only through radical steps. Frank pointed out that since “underdevelopment is the result of exploitation of the colonial and class structure based on ultraexploitation”, development was only achieved “where this structure of underdevelopment was not established because *it was impossible to establish*” (our emphasis; Frank 1972, p. 19). In his view, the “fortunate” areas had been those lacking raw materials valuable for capitalist colonizers since they had not been integrated into the capitalist world economy. Thus, the solution for “underdeveloped” countries was for them to exit the capitalist world order and to introduce a socialist system. There was no other way in between; as Frank made it clear in the title of a 1969 book, the only alternatives were “underdevelopment or revolution” (Frank 1969). By the latter he meant a socialist revolution similar to that in Cuba, which resulted in a split with the United States and a turn towards the Communist Bloc.

As one can see, Frank’s concept about spatial disparities had the firm intention to justify radical political measures and the establishment of a socialist regime. Disparity research turned here into the production and dissemination of a sort of

orientation knowledge, namely political propaganda. And Frank was not the only one to take advantage of such an argumentation. For example, the Egyptian Marxist economist Samir Amin developed a similar concept based on a dual distinction between “center” and “periphery”. In his view, capitalism was manifest in two, essentially different forms in these two contexts.⁸ For him, capitalism in the global center was “autocentric”, thus, “characterized by the balanced internal relationship between the sector producing mass consumer goods and the sector producing capital goods” (Smith 1982, p. 9; with reference to Amin 1980). This was considered to end up in a “normal” growth. Here, producers were on the one hand interested in low labor costs, but on the other they were not advocates for *too* low wages since this would have meant strongly limited purchasing power and little demand for the products manufactured. The outcome was in Amin’s view a rather balanced, “standard capitalism”, with increasing production and increasing purchasing power for the population.

In the periphery, however, Amin saw “distorted” circumstances and “blocked development” (Amin 1976, p. 189). He had the opinion that peripheral areas had been dominated by economies in the global center since the era of colonization, which had managed to maintain this domination over the centuries through sophisticated economic mechanisms. For this reason, the periphery was for him “subject to the logic of accumulation in the centres that dominated them” (Amin 1980, p. 133), and which aimed the “centralization of the surplus on the world scale” (p. 252). Hence, “price structures are distorted” in international trade in order to establish unequal exchange and to “aggravate exploitation in the periphery” (Amin 1978, p. 63). This was also considered to distort the structure of production, consumption, and foreign trade in peripheral economies. Due to artificially low labor costs, the mass consumption regime characterizing the center could not come into being here. Due to this, the production of consumer goods did not begin to increase, and the import of such products also remained at a very low level.

Meanwhile, revenues of the periphery from the export of raw materials mostly landed in foreign companies headquartered in the global center. Only a fraction of this value-added was recycled into the local economy. Moreover, this small part mainly went to the “parasitic” local elite (Amin 1976, p. 193), which were kept in power by foreign supporters in order to sustain the economic, political, and institutional circumstances under which the external exploitation of the periphery faced no threat. In Amin’s view, these narrow but extremely rich elite were the only ones to participate in the revenues. And as the amount of money they could use was much greater than what would have been necessary to cover basic needs, it was spent mainly on luxury goods. In consequence, the rather moderate local human and financial resources that were not needed in exporting branches were sucked up by activities aimed at covering this luxurious demand. Similarly, the limited financial

⁸ As Blomström and Hettne (1984, p. 77) points out, Amin’s dualistic model of two different forms of capitalism was based on the similar ideas of Marini, which we have presented in the current section.

means that one could have possibly spent on the import of capital goods to substantiate future growth also went mainly to the import of luxury goods the local economy could not produce. For this reason Amin was convinced that the “blocked capitalism” brought into being by external forces perpetually “reproduce [d] its own conditions of existence” (Amin 1977, p. 218).

In general, as Smith (1982) underscored, Amin clearly suggested in his works that “peripheral economies have no freedom of manoeuvre in relation to world capitalism” (p. 10). Instead, the fate of the periphery was to serve the global centers of capitalism, which “necessarily” resulted in “the blocking” of its own growth, thus, in “the development of under-development” (Amin 1974, p. 393). In other words, the permanent increase in global disparities was presented as unavoidable in global capitalism. And such a tendency was not only an interest of capitalists in the centers. For Amin, the “subordinated” classes in central economies indirectly also took considerable advantage from the “supra-exploitation” (Amin 1980, p. 163) of the periphery whenever they managed to get additional revenue from their own elite. In the light of these prospects, Amin concluded that “so long as an under-developed country continues to be integrated in the world market, it remains helpless”, since “the possibilities of local accumulation are nil” (Amin 1974, p. 13). Hence, for him, the only and “objectively necessary” chance to get rid of this detrimental situation was a “socialist break” (Amin 1980, p. 131), a revolution.

In the case of Amin, just as for Frank, the analysis of spatial disparity as a problem clearly served the political notion to justify a communist revolution and the sweeping away of capitalism. But besides these radical examples of dependency theories, which were based on a militant language, another concept also emerged that urged political changes with similar, inequality-oriented arguments, yet in a somewhat more moderate tone. This was the world-system model of the US sociologist Immanuel Wallerstein. Influenced by the idea of the French historian Fernand Braudel about the existence of a single world economy, Wallerstein drew up a model of a unitary global capitalist economy, “a unit with a single division of labor and multiple cultural systems” (Wallerstein 1979, p. 5). In his view, this unity was brought into being by international trade, which created a direct connection between three subsystems. These were claimed to be the center, the periphery, and the semi-periphery. The latter was an innovation of Wallerstein compared to previous concepts usually defining a simple dual structure of center and periphery.

For the nature of relations between the subsystems, however, Wallerstein’s view was similar to many other leftist authors. He considered the world system to function in an exploitative way, where the center seized power over the periphery and exploited its resources via unequal exchange, driven by the inherent push of capitalism for “production for profit in a market” (Wallerstein 1974, p. 399). Hence, his concept suggested that the “development” of the center necessarily led to the “underdevelopment” of the periphery, and that the global capitalist system unavoidably produced spatial inequalities on a global scale. Yet, he did not claim this process to create a simple core-periphery structure, but rather a system of three components, where the semi-periphery had an important stabilizing function. Wallerstein had the opinion that the semi-periphery, just as the intermediate levels in Frank’s satellite/metropolis concept, was both exploited and exploiter. For this

reason, to some extent it was itself also interested in the maintenance of the current order, and in blocking the periphery's potential attempts to enforce radical changes in the global framework. Thus, as Wallerstein put it, "the world-economy as an economy would function every bit as well without a semi-periphery. But it would be far less *politically* stable, for it would mean a polarized world-system" (emphasis in the original; Wallerstein 1979, p. 23).

As one can see, Wallerstein presented the *problem* of global spatial inequalities as a direct outcome of the capitalist world order. This interpretation, of course, also revealed what the author considered as a probable and desirable solution to the problem: a socialist turn. Unlike Frank and Amin, however, he did not argue that each country had to make attempts to break with capitalism and introduce socialism. In fact, Wallerstein found such an endeavor useless and actually impossible since, for him, it would not change the one capitalistic world system. Instead, he underscored that for a real solution the world economy as such "must be transformed from a capitalist mode to a socialist mode" (Wallerstein 1977, p. 106). In his eyes, this meant "neither a redistributive world-empire nor a capitalist world-economy but a socialist world-government" (Wallerstein 1979, p. 35). Furthermore, he stressed that "socialism does not arrive one fine morning after the seizure of state power" (Wallerstein 1979, p. 106), but only through a "*process* of continuing class struggle" (emphasis in the original; *ibid.*).

To sum it up, Wallerstein's concept was similar to those of Frank and Amin insofar as it used spatial disparity research to point out what its author regarded as an inherent problem of capitalism in order to justify socialist political goals. Without a doubt, the world system model utilized a less militant vocabulary and envisaged rather a gradual, non-violent and maybe utopian political turn relative to the call of Frank and Amin for revolution. In fact, Wallerstein himself made explicit that he did not see his "projection as being in the least utopian" but also did not feel "its institution [to be] imminent" (p. 35). Yet, from our point of view his world system model followed the same logic as the other authors' theories did. He tried to take advantage of spatial disparity research, which he used as a means to substantiate the socialist aims with which he sympathized.

8.1.4 The Relation of Factual Knowledge to Orientation Knowledge in Leftist Dependency Theories

The last sections explained how from the 1950s onwards several leftist concepts emerged outside the Soviet Bloc,⁹ whose authors interpreted global spatial

⁹ In fact, among the theoreticians whose concepts we discussed in the last sections Samir Amin is the only one who could not be regarded without ambiguities as coming from the "Western Bloc". This is because his concepts were strongly based on the experience he gained in Egypt (1957–1960) and Mali (1960–1963), both countries having a socialist and Soviet-friendly

inequality as a problem, namely a problem caused by the actual world order. Besides obvious similarities, these interpretations had remarkable peculiarities as well, e.g. due to the “situatedness of knowledge” since they emerged in geographical contexts with different political, economic, historical etc. features and influences. In some works it was argued that the dependence and “underdevelopment” of the periphery could be demolished and international disparities could be reduced within a capitalist framework. This approach suggested that peripheral countries could (and actually should) take certain efforts (e.g. import substitution industrialization and the reduction of foreign trade) to strengthen themselves and, hence, to solve their problems on their own. Others regarded global disparities as an unavoidable outcome of capitalism, which could only be cured through a socialist revolution. These concepts were obviously different in their political suggestions, but their notion to use spatial disparity analysis as a means to urge for significant political changes (at least on the global periphery) was a common point. In other words, a strong aim of all these theories was to manufacture orientation knowledge. Meanwhile, they also claimed to explain the underlying mechanisms of spatial inequalities, thus, to produce factual knowledge.

At this point the question arises how the relation of these two forms of knowledge production related to each other. Were the results of empirical and theoretical analyses used to derive political suggestions from them, or did the authors follow firm political interests, and carry out “scientific investigations” only to create substantiation for their programmatic political views? To answer the question, we focus on three questions. First, to what extent dependency theorists tried to take advantage of the image of science? Did they claim their concepts to be theoretically more coherent and/or empirically more valid than the views formulated by their rivals, or did they simply present their concepts as intriguing sets of ideas, not necessarily “better” but rather “other”? Second, did their concepts prove well-substantiated, both in the theoretical and empirical sense, providing an adequate basis for the potential claim of scientific quality? Third, how was the relation between the substantiation and validity of these concepts, and the self-confidence of their authors to derive political suggestions from them?

For the first question, in most works of dependency theories one can find numerous examples of the authors’ claim that their concepts were theoretically better rounded and more in accordance with empirical evidence than mainstream views to which they tried to offer an alternative. This attitude was, at least to some extent, already present in the concepts of non-Marxist ECLA structuralists, who mainly substantiated it by underscoring the remarkable shortcomings of then mainstream neoclassical concepts, likewise stressed by many not belonging to the dependence theorists. Furtado (1964) argued against economics interpreted as “a purely abstract science” (p. 2), which “calls for building models or simplified schemes of existing economic systems, models based on stable relationships

orientation in those years. But neither did Amin work in any country actually belonging to the Soviet Bloc, while he did so for a long time in France and for UN institutions (cf. Amin 1992).

between calculable variables *deemed to be* relevant and important” (our emphasis; p. 1). In his view, such an approach had dominated mainstream economics for a long time. Hence, economics had become fully infiltrated by “logical constructions based on fragmentary observations, on simplistic psychological assumptions” (pp. 4–5), e.g. on those of “free competition” and “free exchange”. Yet, “by dint of sheer repetition these formulations became transformed into dogma” (p. 5), into “the ‘great laws’” of economics (p. 4).

In the light of these, Furtado claimed that “economics for a long time lost the features of an *objective science* and became a mere collection of *precepts*” (our emphases; p. 5). At this point he referred to Myrdal’s related ideas on nineteenth century economics, arguing that “economists, *speaking in the name of their science*, have been airing views on what *they considered* to be socially imperative” (our emphases; Myrdal 1953, p. 4). Thus, similar to a considerable part of social scientists outside the domain of Dependency theories, Furtado took a critical stance on the mainstream economics of the day due to its lack of scientific quality. Meanwhile, he argued for the strong consideration of historical aspects and the adaptation of a “structural view” (p. vii) in economic analysis, which he claimed to have done in his essays. Since Furtado had the opinion that “continuing criticism of economic thought by economists themselves is a *prerequisite of the advancement* of this science” (own emphasis; p. 5), he also suggested that his books on the topic were an important contribution to the “advancement of science”. This implied a clear distinction between then conventional works on “underdevelopment” and global disparities, which Furtado suggested to be non-objective and non-scientific, and his own essay, which was presented as more objective and more scientific.

Explicitly neo-Marxist works on dependency also used the discursive method of denying the scientific relevance of other concepts while presenting themselves as theories basically free of similar shortcomings. Frank, for instance, argued that “most social scientists” posited unrealistic assumptions in their theories, which “effectively defines the theoretical limits of their own creativity but does not correspond to the reality of development and underdevelopment” (Frank 1978, p. 1). In his view, “most contemporary theorists are quite unable to explain – and related policy makers are still less able to change – the nature and causes of the poverty and the wealth of nations” (ibid.). Frank, however, claimed to “free ourselves from the *irrelevance* of narrowly limited neoclassical theory” (our emphasis; ibid.). This was for him possible by taking “the global historical vision of Adam Smith and the dialectical historical analysis of Karl Marx”, which together brought into being “a whole world encompassing holistic, real-world historical, socially structural (and . . . theoretically dialectical) theory of development and underdevelopment” (pp. 1–2). To sum it up, Frank also suggested a difference between most other works, which he found to have ambiguous scientific substantiation and relevance, and his own concepts, regarded as free of fundamental weaknesses.

In neo-Marxist dependency theories the claim of scientific quality and the reference to a suggested non-scientific nature of competing approaches was also

strongly present. Baran began his 1957 essay by making his view explicit on this issue. He leveled fierce criticism at classical and neoclassical economics, whose representatives for him had been from the beginning “the intellectual spear-head” of the “rising capitalist order” (p. 2), thus, in Robbins’s (1952, p. 19) words cited by Baran, “the apologists of the dominant class” (Baran 1957, p. 2). Hence, “bourgeois economics”, which started as “advocacy of capitalism” (p. 4), had become “a mere attempt at an explanation and justification of the *status quo*” (emphasis in original; *ibid.*), “a neatly packed kit of *assorted ideological gadgets* required for the functioning and the preservation of the existing social order” (our emphasis; *ibid.*). Baran had a similarly destructive view about Keynesian economics. In his opinion, this approach “found itself face to face with the entire irrationality . . . of the capitalist order” (p. 7), and “under irresistible pressure of incontrovertible *facts*” (our emphasis), namely the Great Depression, it “implicitly repudiated the zealously guarded ‘purity’ of academic economics” (p. 8). Still, Keynesianism was for Baran just an “effort on the part of bourgeois economic thought to discover a way of *saving the capitalist system* in spite of the manifest symptoms of its disintegration and decay” (our emphasis; *ibid.*). In the light of these, Baran claimed that all “bourgeois” approaches in social sciences were to “provide . . . the requisite rationalization for the systematic effort of the ruling class of the advanced capitalist countries to prevent, or at least to retard, the political and economic liberation of the colonial and dependent nations” (p. 15).

Meanwhile, Baran described how “bourgeois” approaches in his view exiled “dangerous” alternative ways of seeing from the domain of “academic science”. For him, the school of economics and social sciences that began to develop on the basis of Marx’s and Engels’s ideas was judged as “heretical” (p. 7), while “bourgeois” social science tried to keep the claim of being “scientific” and “objective” for itself. Baran even wrote about the contrast between “the ‘Holy See’ of conventional economics” and its “heretical”, Marxist counterpart, suggesting a parallel between the Inquisition of the Catholic Church and the struggles within the domain of twentieth century economics and social sciences.¹⁰ After establishing the image of the self as “being suppressed” by “bourgeois” approaches, Baran claimed that the standard of objectivity and scientific quality was only met by Marxist concepts in general and, for spatial disparity research, by his views about global dependency and inequalities. In his words, this was the only approach to communicate “self-evident truths” (p. 11), such as that of “the conflict-laden, irrational nature of the capitalist order” (p. 5), and the only one to be in line with “incontrovertible *facts*” (our emphasis; p. 9). Hence, Baran’s goal was not to question the existence of a universal and “pure” science, thus, to reveal how science in general produced not only factual but orientation knowledge as well. Instead, he kept the idea of an

¹⁰ Baran also evoked the struggles between the “Holy Catholic Church”, and heretics and the godless while recurrently calling the relation of “bourgeois” science and politics to leftist revolutionary thoughts as “a systematic *crusade*” (our emphasis; p. 12).

omnipotent and “objective” science, but attributed this to concepts being in line with his political conviction, and not with the views of other, non-Marxist thinkers.

The legitimate authority provided by science gained an important role in the works of Amin as well. This was not only manifest in his consideration of the social development predicted by Marx’s model as “an *objective* and necessary rule” (our emphases; Amin 1980, p. 4). He also suggested certain kinds of social analysis to be scientific and others as non-scientific. For the explanation of whether the main tendency of capitalism was a homogenization of the forces and modes of production in various geographical contexts, for instance, Amin expressed his view as follows: “The key to a *scientific* analysis of these problems is a *correct* understanding of the question of technology.” (our emphases; p. 32). Thus, the belief in the superiority of science over other “modes of knowledge” and in the existence of objectivity and correctness obviously infiltrated Amin’s concepts.

Moreover, Amin was rather strict about whom to acknowledge as being within the domain of science and whom not. Given his firm Marxist attitude it is maybe no wonder that his critique of complete disciplines being not in accordance with his views was destructive. He stated, for example, that “the work of anthropology generally *has not been scientific*” (our emphasis; p. 36). It is even more striking that he even expressed disapproval of Marxism in the global center. He was convinced about “the hegemony of the social democratic and revisionist ideologies among the working classes at the centre” (Amin 1978, p. 116). This in his view meant that “the trends of that famous ‘Western Marxism’ . . . are all linked with trends in bourgeois, and therefore pre-Marxist philosophy” (p. 124). From this ironic statement Amin derived an even more critical idea about “Western Marxism”: “even when they ask the right questions, they are incapable of answering these questions because their society is not ready for the answers” (p. 125). Thus, Amin claimed “Western Marxism” to express “a bourgeois point of view” (p. 157), to be “distorted” (p. 157), and consequently incorrect and non-scientific.¹¹ In the meantime, he spoke in high terms about Marxism on the global periphery. As he put it: “the revolutionary credential of the intelligentsia, which at the centre is in the service of capital, is here, in the periphery, in the camp of revolution” (p. 124). And, of course, Amin regarded his own works as being authentic examples of such an objective science produced on the periphery. He claimed, for example, to quantify and “to analyse the contradictions”, namely the volume of exploitation, within the capitalist system (Amin 1980, p. 156). Moreover, while Amin leveled strong criticism against

¹¹ This attitude in Amin’s works in fact attracted serious criticism due to its “economic reductionism” (Smith 1982, p. 11). In Smith’s words, “by locating a person’s class position” (e.g. that one belongs to the class located in the global center), “Amin is ‘reading off’ their political and ideological stance” (ibid.). We agree with Smith in that forming an opinion about one’s view only in the light of one’s country of origin is highly erroneous and can result in serious misinterpretations. Still, the oversimplifying attitude of Amin does not influence what we wrote about his claim of being objective and scientific while denying the same for those with whom he did not agree.

the works of Western Marxists, he claimed his own “statistical illustration of the nature of the imperialist problem” as “not arbitrary” (p. 161).

In sum, a strong notion was apparent in most dependency theories to present themselves as objective and scientific, thus, superior to and more valid than alternative views. Related authors did not question the existence of a science with universal relevance, but tried to identify this exclusively with the form of knowledge production that met their political views. In other words, they were determined in taking advantage of the legitimate authority of science to “sell” their concepts. At this point a new question arises: to what extent do the actual theoretical coherence and empirical substantiation of these concepts meet their authors’ claims about scientific quality? To find an answer, we should make an overview of the main points in these concepts that can and actually have attracted criticism from various directions.

A fundamental issue concerning most theories presented in the last sections is their oversimplifying view of the “center” and “periphery”. The majority of works draw a very simple, dualistic structure of the world. The only exceptions are the model of Frank with a chain-like structure, which implies a more sophisticated hierarchy with more levels than those of the “world metropolis” and “ultimate satellites”, and Wallerstein’s world-system theory with an additional third category of “semi-periphery”. The dualistic models suffer from the same shortcoming as, for instance, the concepts of Myrdal and Hirschman on the US “side” in the Cold War spatial disparity discourse, which differentiated between “rich” and “poor” countries. Such a simple interpretation of the world is highly misleading since it ignores the considerable differences *within* the global center as well as within the periphery. As Disney (1977) put it: “Clearly, there is no problem with locating the US or Great Britain within the center, or Haiti or Mauretania within the periphery. But what about countries such as Portugal, Greece, Argentina and Brazil?” (p. 126).¹² Moreover, not even individual countries can be handled as homogenous in this sense since one can find peripheries within the “most developed” countries as well (such as the south of Italy and Appalachia in the United States, which Disney refers to). In addition, we have to emphasize that certain peripheral districts in countries of the global center might face severe social problems that several central areas in the global peripheries are merely free from. Certain districts in Sicilia or Kentucky, for example, suffer much more from unemployment, poverty, and criminality than San José in Costa Rica, or Gaborone in Botswana, which are

¹² In this sense we are even more critical than Disney, because we do not think that either the United States and Great Britain or “Haiti or Mauretania” could be self-evidently located either in the center or in the periphery if the *exact criteria* of categorization are unclear or unrevealed. Without a doubt, one can easily rely on one’s “geographical imagination” (Gregory 1994) to claim that this or that country belongs to the “global center” or to the “periphery”. But in our view this mirrors such a lack of self-reflexivity which is far less than desirable in a “scientific” discourse. Still, we consider Disney’s lines as relevant insofar as he effectively points out why dual categorizations in international issues easily become over-simplified, unrealistic and misleading.

relatively wealthy and safe centers of their countries otherwise often counted to the “global periphery”.

As these examples show, compressing the difficult network of global political, economic and social relations into a simple dualistic scheme is highly questionable and misleading. It has a clear political suggestion, however, since it efficiently suggests an unbridgeable gap between “center” and “periphery”. Here, the responsibility of the center for the problems of the periphery can be exaggerated on the one hand through implying an extreme separation of the two “poles” and a drastic subordination of peripheral countries. On the other hand, precisely the claim of a profound separation between the “center” and “periphery” can make the reader feel the situation so severe, that radical attempts to change this might seem justifiable or even necessary. Moreover, speaking about “the center” and “the periphery” in such concepts not only hides the considerable inner heterogeneity of both categories. It also gives an oversimplified interpretation of the process of “underdevelopment” itself, presenting it as “a unitary process with uniform causes and uniform effects” (Bernstein 1979, p. 74). Thus, the national peculiarities of “development” and “underdevelopment” remain fully unrevealed, just as their underlying mechanisms.

For the models of Frank and Wallerstein, these are not that one-sided, but neither are they really more sophisticated. The fact that Wallerstein defines a “semi-periphery”, actually a “buffer zone” between the countries considered as “exploiters” or “exploited” does not mean a radical change in the concept. In fact, it still suggests a world order dominated by unquestionable “centers” on the one hand and a hopeless “periphery” on the other. In general, the same goes for Frank’s model, which is similarly focused on a monopolized power hierarchy on the global level with the “unlimited” international dominance of the United States.

Another common but questionable point in these concepts is the claim that “underdevelopment” in the periphery is a necessary concomitant of “development” in the center, which suggests “global development” to be a zero-sum game. This assumption is based on weak foundations. A main point of criticism here is that not even the economic boom in the Western world during the era of colonization was a simple outcome of exploiting the resources of the global periphery. As Corbridge (1986) puts it, the authors of these concepts “failed to see that the exploitation of the periphery is only one result of the supposed crisis of profitability in the core. Of equal, or if not greater, importance is a continuous drive to greater productivity and technological change in the metropolis” (p. 42). Furthermore, although it would hardly be possible to deny that the imperial powers took great advantage of the resources they extracted from their colonies, a claim that their growth was only based on this is also highly disputable. For mineral resources, for instance, in 1913 the “developed world” still covered some 96–98 % of its own resource consumption (see Meyers 1987). Besides, just as empirical findings challenge the claim that “development” in the center unavoidably leads to “underdevelopment” in the periphery, it is also not necessary that the “exploitation” of the periphery would automatically end up in increasing “development” in the “exploiter” areas. Instead, as Corbridge (1986) underscores, even European history is full of colonizers who could and others who did not manage to take advantage of their colonies in the long

term. Britain, for instance, emerged as the leading industrial and military power of the world partly due to the high volume of resources provided by its colonies. Spain and Portugal, however, failed to convert the same richness in raw materials to long-lasting economic improvement and military power.

A further point of criticism is that the permanent reference to the dichotomy of “development in the center” and “underdevelopment in the periphery” is difficult to maintain in absolute terms. As Gonçalves (2005, p. 69) emphasizes, the global periphery witnessed in the postwar period not a dramatic decline but a vast increase in industrial investment and production. Thoughts (especially those of Amin) concerning the stagnation in local markets in the periphery also contradict the empirical evidence that the significant growth actually carried out in these countries in the 1950s and 1960s was mainly based on growing local demand instead of a radical increase in exports (cf. Schiffer 1981). Presumptions about an intensifying “underdevelopment” on the periphery become even less substantiated if one chooses a somewhat broader focus including more than per capita production or nominal income. One piece of evidence that is easy to measure is that life expectancy in most of the so-called “underdeveloped periphery” has significantly grown since World War II (cf. Corbridge 1998). The same goes for education and literacy, which has also improved much in this period (cf. Meusburger 1998a, pp. 261–267). Hence, “underdevelopment” could mostly refer to an existing gap between what is called center and periphery. But an absolute “underdevelopment” of the latter (and therefore a decreasing level of material well-being, education, and health indicators, etc.) cannot be substantiated, and if one considers the indicators mentioned above, even the idea of constantly growing global inequalities seems to lack substantiation. In fact, these oversimplifying dual interpretations tend to neglect that the geographical division of labor on a global scale indeed creates certain center-periphery relations, where certain parts of global production are concentrated in other countries. This difference, however, does not automatically mean a strong dichotomy in all social indicators. A rather peripheral position in the global production system does not necessarily equal stagnating or decreasing levels of relative income, education, life expectancies, etc. This does not mean, of course, that international disparities could and would not increase at all. But one can speak about such a tendency only with regard to certain variables, and not in a comprehensive sense as it is commonly suggested in dependency theories by such terms as “development” and “underdevelopment”.¹³

It needs to be noted here that among dependency theories neo-Marxist works explicitly blamed capitalism for the whole problem of “underdevelopment” and global disparities. In the last paragraphs we presented numerous arguments to explain that “underdevelopment” in the periphery can neither be interpreted simply

¹³ It is worth noting here that the implication of absolute “underdevelopment” in the periphery was also strongly criticized by many among the Marxists, who—in line with Marx and Lenin—argued that in “developing” countries capitalism was a progressive force, which brought “development” in a certain historical period (Gonçalves 2005, p. 109).

as the necessary concomitant of “development” in the center, nor “development” is fuelled only by the “exploitation” of the periphery. Such a mechanistic reasoning in its recent form simply falls short of revealing the complex mechanisms that drive the world. This point goes to neo-Marxist views as well, which adopted this oversimplifying interpretation, and expanded it by tracing back such a simple structure of global dependency to what they called inherent failures of capitalism. Hence, if the much too simple explanation for global disparities is challenged (as it was indeed in the last paragraphs), the idea of blaming capitalism for the whole problem also proves unsustainable in its recent form. But even if the link between “development” in the center and “underdevelopment” on the periphery, thus, between capitalist production and global disparities were as simple as these concepts suggested, neo-Marxist dependency theories would still have a major shortcoming, which is pointed out as a critique by some Marxists as well. As Laclau (1971) underscores, if one defines capitalism as “production for profit via exchange”, thus, takes exploitation and capitalism as equal as it is tendentiously done in radical dependency theories, “we could conclude that from the neolithic revolution onwards there has never been anything but capitalism” (p. 25). At this point neo-Marxist dependency theorists simply contradict Marx’s view about the exploitative nature of all modes of production between primitive communism and modern communism. This inconsistency, however, remained hidden in neo-Marxist concepts, while it had a clear propagandistic function. By using the term “capitalism” with reference to virtually all non-socialist modes of production, all problems that emerged in any non-socialist systems could be presented as the failure of capitalism. This was also true for global inequalities.

One can also see that leftist theories failed in identifying the possible ways out of dependence and subordination for the global periphery. The works of Prebisch and his direct followers saw the solution for dependency and increasing global inequalities in the reduction of global trade, protectionism and import substitution industrialization. This suggestion was put in practice by several governments in Latin America during the mid- and late-1950s (Gonçalves 2005, pp. 54–55). After some positive early tendencies, however, the initiative was doomed to end since it rather increased than decreased both dependency and global inequalities. As O’Brien (1975) puts it: “Income distribution seemed to be growing more unequal, and a large segment of the population remained marginal. . . . National policies for industrialization had succumbed to the multinational corporations, and industrialization in Latin America was primarily undertaken by foreign investors.” (p. 11). Due to this, the social problems induced by social and spatial disparities increased, which in many countries led to the collapse of the whole economic system and, instead of a socialist revolution, to political takeover by nationalist, conservative military juntas (ibid.).

The radical imperative of neo-Marxist theoreticians that the periphery should exit the capitalist world market and break capitalism through a socialist revolution proved even less useful in practice. Amin, for instance, presented the takeover of the Khmer Rouge in Cambodia as a good example of what to do. As he put it, referring to the leaders of the movement as “better Marxists”, “the lesson in

revolutionary strategy they have given is doubtless the most relevant one for most of the countries in Africa” (Amin 1977, p. 152). Hence, a “successful” realization of what Amin regarded as the optimal solution for global disparities was the total isolation of a small agricultural country from the world economy, accompanied by the profound destruction of industry and commerce and a mass liquidation of one-fifth to one-fourth of the country’s population (cf. Kiernan 2003). Some other countries adopting a policy otherwise in concert with socialist isolationism were China after the split with the Soviet Union in the early 1960s (until the gradual opening in the next decade) and communist Albania between 1978 and 1990. In both cases this policy resulted in a continuous worsening of economic conditions, which, after a while, forced a gradual re-integration into world economy. Meanwhile, other examples revealed that leaping forward from the global “periphery” to the “center” was possible within a capitalist framework. This was especially the case for the “Four Asian Tigers” (Hong Kong, Singapore, South Korea and Taiwan), which, coming out from the periphery, underwent robust economic growth from the 1960s and have become top centers of global capitalism.

The neo-Marxist idea that center-periphery relations on the international level and global disparities are necessary outcomes of capitalism but would disappear in socialism is also a concept actually impossible to sustain. In a theoretical sense, the implicit underlying assumption of this claim is that “people who are poor, non-Western and super-exploited by imperialism will not exploit each other” (Smith 1982, p. 17). Such a supposition is in itself highly naïve and disputable. But besides theoretical probabilities, empirical evidence also challenges the utopian idea about socialism and the end of all problems it is claimed to bring about. A perfect example is the former Soviet domination in Eastern Europe.¹⁴ As Bunce (1985) points out, in the postwar period the political conglomerate of “friendly” socialist countries was not a system free of dependency but an “ideal empire” (p. 3) from the view of the Soviet top party leadership in Moscow. Stalinization resulted in these countries under strong Soviet dominance no less severe than European colonial suppression in most African or Asian colonies.

For Bunce, the reasons were manifold. After the end of World War II, the whole area and its borders with the capitalist world were controlled by the military machine under Soviet command. On this basis, the local political system in all “satellite” countries was thoroughly transformed in line with the interests of the USSR. Political power was monopolized and put in the hands of small local communist cliques, in fact puppets of the Soviet leadership. The plan of Soviet domination was worked out so painstakingly that the “Stalinist empire” also paid attention to such issues as preferring Muscovite communists in leading positions, while hindering indigenous communists from landing in the top level of the

¹⁴ It is important to underscore here that most neo-Marxist dependency theorists regarded the Soviet system as socialist. Hence, empirical evidence on the latter can be used reasonably to judge the validity of these authors’ claims about socialism. For a more detailed discussion of the relation of socialism as such and “real existing socialism” see Sect. 8.2.2.

political hierarchy. Meanwhile, economies were nationalized, so they became fully subordinated to local communist governments and, actually, to the international communist political machine commanded from Moscow. Soviet dominance was only strengthened by the fact that national communist elites lacked significant political legitimacy since their power only resulted from the firm Soviet assistance they gained. Furthermore, the economic structure in satellite countries as well as their international trade was reshaped so that they became heavily dependent on raw materials provided by the USSR. Since Eastern Europe was in the meantime almost profoundly isolated from the capitalist world economy, economic dependence on the Soviet empire reached extreme levels.

In fact, Bunce (1985) also underscores that the international situation within the Soviet Bloc underwent considerable changes during the next decades. For instance, the maintenance of Soviet military forces in the satellite countries proved a huge burden in the long term, which sucked up crucial resources from the development of the USSR economy. Furthermore, as decreasing economic competitiveness led to deepening structural problems in the bloc, the Soviet Union could not fully focus on its own attempts to raise productivity. It had to give stronger and stronger support to Eastern European countries, where the already weak political legitimacy of national leaderships could have been absolutely undermined if worsening economic conditions would have resulted in a similar decrease in the population's (rather low) standard of living. This led to various indirect attempts from the side of the Soviet Union, such as prices for raw materials exported to the socialist allies gradually falling behind the prices for the same products delivered to capitalist countries. Hence, Eastern Europe gradually became a burden for the USSR in many aspects, or in the words of Bunce, "from a Soviet asset to a Soviet liability" (p. 1). Still the decisive geopolitical importance of the region for the Soviet Union was not a matter of question, so a scenario where these countries could have been allowed to exit the Soviet Bloc remained profoundly impossible until the collapse of the Soviet system. Thus, although the form of dependency in Eastern Europe has changed during the decades, the dependency of the region remained obvious. In consequence, the difference between the claim of Marxist dependency theorists about the end of international subordination and global disparities after socialist revolution and the reality of the Soviet Bloc was irreconcilable.

In sum, there is a great deal of empirical evidence as well as theoretical considerations that challenge the major concepts of dependency theories. This does not mean, of course, that the questions and problems their authors drew attention to would not be relevant. For example, the criticism they levelled to conventional neoclassical theories was highly relevant and was in accordance with the view of many researchers otherwise not belonging to structuralist or Marxist approaches. Neither do we think that the underlying mechanisms dependency theories claimed behind global disparities would all be non-existent and absolutely irrelevant to the topic investigated. Yet, the simple causal relations these authors claimed between such complex phenomena as international trade and "underdevelopment" cannot be sustained in the light of theoretical and empirical

findings. This also means that the easily worded and intriguing (and for many certainly attractive) political statements and slogans that were derived from the oversimplified concepts were also much less unambiguous than they seemed to be in the interpretation of their authors.

From our point of view the discrepancy between the superficial and oversimplifying interpretation of the world these concepts gave and the self-confidence of their authors while deriving political conclusions from this interpretation is of special importance. As one can see, all concepts of dependency claimed that they have identified both the main reasons and the cure for “underdevelopment” in the periphery and for global inequalities in some simple factors. They simply blamed the actual global order (or directly capitalism in the case of radical concepts) for all problems of the periphery. Hence, they also suggested that decreasing international integration or, in its drastic version, an exit from the global capitalist order might solve these difficulties. In other words, the interpretation of the actual situation was as simple as its claimed solution was. And since this simple solution was fully in line with the obvious political motivations of the authors, the underlying analysis was also accepted as reliable in revealing the real reasons behind actual processes, even if they had in fact severe shortcomings.

This means that the authors barely bothered to think through in the light of their analytical results whether their simple interpretations could indeed have enough explanatory power to explain complex issues. Instead, they much too easily shifted to the domain of political propaganda to offer simple solutions to phenomena driven by factors claimed to be similarly simple. This was especially remarkable for neo-Marxist theoreticians, who went well beyond blaming external forces for a given country’s situation and suggesting policy measures, since they urged in the light of their findings not less but to carry through a socialist revolution. In general it is more than remarkable that all authors felt free to derive far-reaching and often radical political conclusions from their remarkably simple interpretations of the world. They never took the other road of considering first whether their theoretical and analytical results could fall short of explaining the complex issues they were focusing on. Since these results seemed to substantiate their political goals, they were accepted. Such a cavalier attitude to analytical results that could be presented as “proofs” for political aims suggests that in these concepts the production of orientation knowledge was superior to the manufacturing of well-grounded factual knowledge. In other words, many dependency theorists, especially neo-Marxist ones, tended to substitute the much criticized factual shortcomings as well as implicit orientation knowledge inherent in other (either neoclassical or Keynesian) concepts by a new (Marxist) form of orientation knowledge. What they did was not “purifying” contested concepts from their weaknesses, but rather offering a new form of propagandistic knowledge instead of the old one. Thus, similar to many other concepts described in this essay, dependency theories also reveal the strong political motivations behind spatial disparity research, and that political considerations easily gain priority over the notion to really *understand* phenomena.

8.2 Another Approach to Blame Capitalism for Spatial Disparities: David Harvey, Neil Smith, and the Uneven Development Concept Rediscovered

8.2.1 *The Marxist Interpretation of Uneven Development as “The Hallmark of the Geography of Capitalism”*

Besides dependency theories, the 1970s gave great impetus to another leftist theoretical stream as well, focusing on what is called *uneven geographical development*. The emphasis here was put on the dialectical tension between geographical differentiation and equalization, an idea that had already emerged in the works of Lenin (see Sect. 5.3). For this view, capitalism has an inherent tendency to equalize all areas respective to the mode of production by homogenizing the geographically different patterns of production and consumption over the whole area it dominates. Meanwhile, however, capitalist competition is claimed to perpetually produce winners, who can overtake their rivals, and losers, who fall behind other competitors. The point is that the latter factor continuously tends to produce spatial disparities, a process that capitalism's other inherent tendency of equalization tries to countervail, but cannot eliminate. Thus, capitalism is considered as a mode of production unavoidably leading to spatial disparities. This concept, which had been first elaborated by Lenin in the early twentieth century, was re-discovered and improved from the 1970s onwards by many researchers, who also internalized the view about a straightforward link between capitalism and what they called uneven spatial development. In fact, this way of leveling criticism at capitalism was likewise a main feature of radical dependency theories we presented in previous sections. The concept of uneven geographical development has, however, two important differences relative to dependency theories. First, the concept of uneven geographical development emerged mainly not as a reflection of problems the “underdeveloped” countries suffered from, but as an approach rather focusing on social challenges in well-off countries, especially their urban districts. Second, unlike dependency theories, the uneven development concept was developed by geographers. In consequence, it opened an academic debate much more sensitive to theoretical issues concerning spatial relations and the space itself than the concepts of economists and sociologists about global dependency.

These were true for the very genesis of the approach in the early 1970s, when David Harvey published his book *Social Justice and the City* (Harvey 1973) to give an explanation for urban problems such as gentrification, the formation of ghettos and urban poverty. Harvey, distancing himself from his earlier positivist works (cf. Harvey 1969), attempted to come to terms with these issues not only in a descriptive sense, but even analytically, revealing the fundamental processes in the background. This notion led him in the succeeding years to pay special attention to the works of Marx (Castree 2004), “to reconstruct [his] theory with space . . . clearly integrated within it as foundational element” (Harvey 1996, p. 9). An important

outcome of this enterprise was the essay *The Limits to Capital* (Harvey 1982), in which Harvey gave a geographer's interpretation of the concept of Marx, creating a sophisticated concept of uneven geographical development.

The starting point of the book was the Marxian claim of capitalism to be a contradictory mode of production. For Marx, the main interest of capitalists was to realize as much profit as possible. In order to achieve this goal, it was believed they attempted to reduce production costs by various means. One of their typical strategies was permanent innovation in terms of technology and organization. In addition, Marx regarded capitalists as constantly trying to decrease labor costs by keeping wages and salaries low, and, if possible, by substituting workers by machines that produced the same value at lower costs. Meanwhile, however, capitalists had a firm interest not only in manufacturing their products as cheaply as possible, but also in selling them as expensively and in as great a quantity as possible. The latter required many potential customers with huge purchasing power. Since the vast majority of potential customers were constituted by the mass of workers, the latter's material well-being was a crucial prerequisite for capitalists to have their products sold. In other words, most individuals had a "double function" in the eyes of capitalists: as earners and spenders. And this was the point where the contradiction emerged. Given this, Marx claimed that capitalism was necessary to cause crises. For him, the attempts of capitalists to reduce production costs (including expenditures on workers) perpetually resulted in decreasing consumption. But since consumption fell back, the spectrum of opportunities where capital could be invested in a profitable way also decreased. Capitalists had, however, a firm interest against carrying out investments that would produce losses. For this reason, in times of scarce opportunities of investment they tended not to invest their capital but rather to accumulate it. In other words, what emerged was "a surplus of capital relative to opportunities to employ that capital" (Harvey 1982, p. 192), and this ended up in overaccumulation.

For Marx, this inherent contradiction made capitalism a "crisis-prone system" (Castree 2008, p. 65). Concerning the outcome of this contradiction, he as well as many of his followers (especially those before the Cold War¹⁵) suggested that crises of overaccumulation would be followed by mass devaluation, finally leading to a socialist revolution, where workers swept away the capitalist order. Harvey underscored, however, that such an event had not happened yet, although capitalism underwent several crises during the nineteenth and twentieth centuries. The question arose as to how this "survival" had been possible. To give an answer, Harvey went beyond the explanation given by Marx, which he called the "first-cut theory of crisis" (Harvey 2006, p. 190). Harvey's main focus here was on the ability of

¹⁵ As we have shown in Sect. 5.6, the emergence of the United States as a superpower during World War II instead of the ultimate collapse of capitalism undermined in the eyes of many the claim of Marx (and, for instance, Lenin) about the self-destruction of the capitalist order. Voices of criticism against this Marxian idea emerged among theoreticians in the Soviet Bloc as well, although forming such an opinion explicitly was not in accordance with official Stalinist propaganda and thus it was a dangerous act.

capitalism to reveal new opportunities for profitable investment. In his view, if the “primary circuit of capital” (which referred to the production and realization of profit, and its transformation into productive capital through investment) offered no such possibilities any more, the financial system was able to open up a “secondary circuit of capital” (Harvey 1978). This “secondary circuit” referred to a mechanism where financial institutions sucked up surplus capital and channeled it towards activities where profitable investment was possible.

An important example for this in Harvey’s view was the transformation of surplus capital into investments in the *built environment*, which plays a decisive role in the efficient functioning of the capitalist system. As Marx already pointed out in his analysis, a fundamental idea within capitalism is to reduce turnover time in order to speed up the cycle of production (and profit-making). A major prerequisite to reach this goal is to reduce the time required for transport and communication across the market, which has a geographical extension that cannot be neglected. Hence, capitalists have firm interests in the development of transportation and communication (cf. Marx 1976[1867], pp. 505–508), or in Marx’s words, “the annihilation of space by time” (Marx 1973[1857–1858], p. 524). In addition, built environments of production (such as factories), consumption (supermarkets, malls, etc.) and reproduction (e.g. homes) are also crucial for capitalism to function well (cf. Castree 2008). Of course, the construction of the necessary infrastructure has very high costs, and generates profit only in the medium or long term. But in a crisis of overaccumulation, such investments can reasonably absorb a great deal of surplus capital. Thus, they can help capitalists in “buying time through fixed investments” (Jessop 2006, p. 147) and in coping with economic problems. In this story the role of financial markets is that they enable surplus capital to find its way in the form of credit to large projects aimed at the built environment. Furthermore, land markets are also of crucial importance since they mediate investments to the “highest and best” uses of land (Sheppard 2006, p. 125). For Harvey, this mechanism, which he calls the “second circuit of capital” with reference to Lefebvre (2003)[1970], serves as a “temporal fix”. It enables capitalists to invest in structures necessary to the long term growth of production, while freeing them from the serious problem of overaccumulation in the short term.

Another opportunity to absorb surplus capital is offered by financial capital, based on which a “third circuit of capital” is claimed to emerge. According to Harvey, the contribution of financial capital to the solution of a crisis of overaccumulation is manifold. A crucial point here is that “finance markets ease capital flows from less to more profitable areas to the economy” (Sheppard 2006, p. 125), which refers to a set of mechanisms. The financial system enables “the mobilization of money as capital” (p. 262), which is due to its ability to convert capital into money (and, of course, money into capital). Since money is much more mobile and flexible than other forms of capital (e.g. physical capital), the financial system reduces “the cost and time of circulation” (p. 263) as well. This factor can also play a significant role in keeping the rate of profit high, thus, counteracting overaccumulation. Moreover, it is not only the dynamics of circulation that increase, but also the number of potentially profitable investments that surplus capital can reach after

being converted into money. The mediating role of the financial system becomes manifest in further aspects as well. For instance, the credit system functions as “a kind of nervous system for coordinating the divergent activities of individual capitalists” (p. 270). By indicating the rate of interest and its unevenness over various investment opportunities, it serves as a “‘barometer and thermometer’ of capitalism” (ibid.). In other words, it provides up-to-date information to capitalists, who can thus investigate and decide much faster where to invest. Besides, the financial system enables the “centralization of capital” (p. 271), since relatively small amounts of surplus capital possessed by various capitalists can easily be joined up. This opens the way for the realization of large-scale projects too great to be financed by single investors. To sum it up, in Harvey’s view the financial system can on the one hand smooth problems in cases where overaccumulation does not result from the lack of reasonable investment opportunities, but because surplus capital is simply “inflexible” in finding a way to profitable projects. Beyond easing capital flows, the financial system has another important role as well during crises of overaccumulation. If necessary, it can itself also absorb a great deal of surplus money in the form of fictitious capital, such as derivatives. This creates new investment possibilities, which can generate high profits, even if this profit can merely be realized only in the medium or long term.

These two circuits added to the one defined by Marx, however, unavoidably fail in Harvey’s view in giving a permanent solution to overaccumulation. For investments in the built environment, they might delay the devaluation of capital forecasted by Marx, but only temporarily. In fact, they lay down the fundamentals for an even more dynamic and unbalanced growth in the long term than the one having led to the actual overaccumulation. In the light of this, such investments rather seem only to postpone the outbreak of actual problems, with the delay just increasing the potential severity of the crisis. Besides, it was likely for Harvey that “new investments made via the financial system will fail to produce the wealth necessary to pay interest” (Castree 2008, p. 67). This was expected not only due to the very slow temporal turnover of these investments, but also because of the limited time period in which these investments could indeed generate profit. As Harvey underscored, large-scale investments in the built environment only promoted economic growth until they were of a state-of-the-art technological standard. After a while, however, old airports, railways, bridges etc. became obstacles for further growth, especially as their technological upgrading and their replacement would have enormous costs, so thus these were likely to take place much later than desirable. Hence, the profit produced by these investments could be significantly eroded or even outpaced in the long term by the negative consequences of the path dependence these installations caused.

Outcomes of the functioning of financial markets were regarded as similarly questionable. First, they “threaten to extend themselves dangerously beyond a monetary base ultimately rooted in the process of production” (Callinicos 2006, p. 49). This was to end up in severe failures in the economy, or even in the collapse of financial markets. Second, the “third circuit of capital” likewise tended to produce dangerous fluctuations since “fictitious capital, whose value is rooted

solely in investors' confidence, was subject to dramatic speculative booms and busts" (Sheppard 2006, p. 125). These factors were considered to pose extreme threat to the stability of the economy and to lead to serious crises in the foreseeable future. In other words, Harvey regarded both the improvement of built environment and investments in the financial system as only temporary solutions to overaccumulation, which finally led to even more severe crises than those they were initially expected to solve.

At this point, it was geography that offered another opportunity to capitalism to cope with the crisis through what Harvey called the "spatial fix". As he underscored, according to the logic of the English language this term could have two meanings. The first is to secure something in space so thus "it cannot be moved or modified" (Harvey 2001, p. 24). The second meaning relates to the expression "fixing a problem", thus, to "resolv[ing] a difficulty, tak[ing] care of a problem" (ibid.). In Harvey's works "spatial fix" was basically used in the second meaning, referring to "capitalism's insatiable drive to resolve its inner crisis tendencies by geographical expansion and geographical restructuring" (ibid.).

The potential forms of such a "spatial fix" are manifold (cf. Harvey 1982, pp. 432–438). One possibility is that capitalist producers open up new markets to increase consumption, which makes the outputs of overproduction saleable and offers new possibilities of profitable investment. Due to this, the overall rate of profit does not decline and the crisis of overaccumulation is avoided. A second option is to export capital to regions where a higher rate of profit can be achieved, which creates "a new and international division of labour, a division suited to the requirements of the chief centres of modern industry" (Marx cited in Harvey 1982, pp. 434–435). Here countries and regions with a lower level of wages or with unused resources providing a good basis for the creation of new productive forces are of special interest. A third solution is primitive accumulation, which in its basic interpretation results from an increase of the proletariat through the appropriation of the means of production they have control over. In his later works, Harvey has tended to break with the adjective "primitive" and to speak about "accumulation by dispossession" (Harvey 2003, p. 137) instead in order to stress the on-going nature of this process even in our current age. Finally, the most aggressive form of the "spatial fix" is to "export the devaluation" (Harvey 1982, p. 438). This can mean on the one hand "the export of unemployment, of inflation, of idle productive capacity" (ibid.), for instance. On the other hand, however, such a strategy can directly aim at "the physical destruction and forced devaluation of a rival's capital" (ibid.), e.g. through war.

In a historical sense, the four forms of the "spatial fix" could easily be carried out at the cost of non-capitalist societies. These could be forced by capitalist powers to get involved in the capitalist exchange of commodities and money. They constituted perfect targets for capital export from "developed" countries suffering from overproduction. Their inhabitants, or at least a certain part of them, could easily be dispossessed of the properties they had, such as from their land, animals, or the sources of raw materials they controlled. Finally, even non-capitalist countries could be exposed to attempts of the capitalist powers to break down the

production or export of their rivals. All these strategies, however, resulted in the gradual integration of formerly non-capitalist economies into the capitalist world order, so thus their potential to “fix” the crises of overaccumulation has decreased to close to zero by now.

This does not mean, of course, that capitalism has lost its ability to operate with “spatial fixes”. New market capacities can still be created *within* the capitalist world, either through population growth or through “the mobilization of latent sectors of the reserve army” (p. 443). Moreover, a viable solution to expand markets is “an intensification of the capitalist mode of production” (p. 435) within “peripheral” regions. The same goes for the export of surplus capital, which remains possible as long as regions with lower wage levels and/or with the potential of creating fresh productive forces (e.g. based on unexploited minerals) exist. For Harvey, “accumulation by dispossession” also remains an option in a global capitalist order, even if “pre-capitalist and intermediate social formations” (p. 438) are already exhausted. In his words, under such circumstances capitalism “has to cannibalize itself” (*ibid.*), what basically equals the “proletarianization” of capitalists (*ibid.*). As Harvey put it, “some capitalists . . . become formally subordinate to other capitalists”, while “others are forced into the proletariat directly” (*ibid.*). The fourth form of the “spatial fix”, the “export of devaluation” can also be interpreted within the capitalist world. In fact, the possibility of “the physical destruction and forced evaluation of a rival’s capital through war” (*ibid.*) is highly compatible with Lenin’s views about military clashes between capitalist countries elaborated in his concept of imperialism (cf. p. 442). Hence, for Harvey, the relevance of the four variants of “spatial fix” is not historical, but profoundly contemporary, since they can also function in the recent world dominated by the capitalist mode of production.

Some followers of Harvey have identified further opportunities for capitalism to handle the problem of overaccumulation. There is a growing literature focusing on the “accumulation by dispossession” that takes place by the privatization of public goods. A typical example is that of the commons, e. g. water resources, public places, or even the aesthetic of landscapes: once privatized, a great deal of persons can be excluded from having a control over or taking advantage of them (cf. Jessop 2006; Stahel 1999; Swyngedouw 2005). The privatization of public utilities such as education and health care is another manifestation of the same strategy (cf. Jessop 2006).

Another remarkable point with regard to “temporal” and “spatial fixes” is the strong link between the two categories, which are in fact inseparable. For various sorts of the “temporal fix”, although Harvey defines them as postponing the emergence of overaccumulation to future times, their spatial implication is also obvious. Large-scale investments in the built environment function as “spatial fixes” as well. By “fixing” capital in the geographical space, such investments can in themselves upgrade certain landscapes and promote future growth in production there. Typical examples for this are construction projects on railways, motorways, airports, dams etc., which can exert decisive influence on the perspectives of economic growth in the region where they are located. And this,

just as the strategies explicitly called “spatial fix” by Harvey, has a strong implication on spatial unevenness of “development” since such investments have a certain “territoriality” (Harvey 1982, p. 398). They benefit certain districts and, by this, indirectly change the relative position of others to the worse.

Furthermore, the success of such “temporal fixes” strongly depends on spatial issues, namely on the “spatial configuration” (p. 395) of other elements into which large-scale construction is integrated. The economic efficiency and multiplier effect of such investments is also a function of the volume of productive potentials they can mobilize. The long-term economic impact of an airport, for example, is moderate, if it is located far from large urban agglomerations or if it is difficult to get there from the city due to lacking infrastructure. Similarly, motorways that connect cities whose economic potential is poor cannot generate considerable growth in production. Thus, “temporal fixes” are highly “spatial” in nature.

The same goes for various forms of “spatial fix”, which can similarly be considered as “temporal fixes”. In fact, each category among the four that Harvey presented as forms of the “spatial fix” constitutes an opportunity rather to postpone crises of overaccumulation than to give a permanent solution to them. The stabilizing effect of opening up of new markets is only temporary since these markets get saturated after a while, so thus further markets should be created later on. Similarly, the export of capital to areas where the rate of profit is higher stimulates rapid growth in the new location, which finally leads to overaccumulation there. Furthermore, the emergence of “new productive forces in new regions pose a competitive threat to home-based industry” (p. 435), which in consequence will face even more severe crises in the long term than those capitalists initially tried to postpone in the short term. In Harvey’s view, “accumulation by dispossession” has its limits likewise, because it becomes more and more complicated after a while to find new properties to be expropriated, and this endeavor breeds increasing social and political unrest. Finally, the “export of devaluation” can easily end up in military conflicts that undermine economic production and political stability not only in the “enemy country” but at home as well. As Harvey put it, a possible outcome is a “global war”, “the ultimate form of devaluation” (p. 442).

Given the inseparable nature of “temporal” and “spatial fixes”, which is reflected in these examples, it is worthwhile to handle various “fixes” as “two sides of the same coin” (Castree 2008, p. 66), as all being “spatio-temporal fixes” (Harvey 2003). For the long-term effect of these “spatio-temporal fixes”, the explicit view of Harvey is that without any exception they can only postpone but not prevent the outbreak of crises. In his words, “devaluation is the end result, no matter what” (Harvey 1982, p. 435). Yet, such fixes rearrange the spatial configuration of production and consumption again and again, they upgrade certain landscapes while downgrading others, so they generate “chronic instability in ... spatial configurations” (Jessop 2006, p. 149).

This is rooted mainly in what is considered an “inherent tension between the ‘fixity’ and ‘mobility’ of capital” (ibid., p. 148). The former tends to fuel the emergence of agglomerations, thus, geographical concentration. But in Harvey’s

view “tendencies towards agglomeration obviously encounter both physical and social limits” (Harvey 1982, p. 418) due to capital’s drive for “mobility”. Hence, increasing rents, the shortage of free space, the overuse of infrastructure and related social tensions give momentum to spatial dispersal. This becomes manifest in the flow of capital as well as labor to relatively “unused” areas. “But dispersal also encounters powerful limiting constraints” (ibid.). On the one hand, capital cannot be profoundly mobile since certain forms of it are “tied down” (ibid.) in concrete processes in concrete places. For instance, the relocation of productive capacities might mean that they are grasped out from the set of fixed investments within which they functioned well. If a company closes its plant and opens a new one in another country, related roads, railways and other facilities at the old location cannot be mobilized. Similarly, when a manufacturing plant is resettled, the mines providing raw materials for production necessarily remain at their previous location since this cannot be changed. On the other hand, the spatial dispersal of capital goes against the economies of scale, which plays a crucial role in the increase of production. In consequence, concentration and dispersal are present at the same time. Both might accelerate suddenly, and at any time the one can speed up and outpace the other.

In fact, these findings are not profoundly new in the history of spatial disparity research. Although in another language and under the aegis of another political and economic ideology, they have many suggestions strikingly similar to those of Myrdal and Hirschman in the 1950s (cf. Sects. 6.7.1 and 6.7.2), and even to those of Krugman in the last 2 decades (Sect. 7.2). Much more remarkable is the innovation of Harvey’s uneven development concept relative to previous leftist works, be they early twentieth century ideas or contributions to dependency theories. As Sheppard (2006) underscores, these concepts claimed to explain “how core locations exploit peripheral ones” (p. 129). Their main notion was to suggest a permanent asymmetry in power relations between “central” and “peripheral” areas, which was expected to result in a constant increase in spatial inequalities. Harvey, however, broke with the idea of such a “one way sort” of cumulative polarization. He did not blame capitalism for perpetually opening the gap between “developed” and “underdeveloped” territories, but rather for “the production of geographical difference” (Harvey 2000, p. 79), thus, a permanent instability in spatial configuration. In other words, his criticism went to the claimed inherent notion of capitalism to continuously create spatial disparities, but not necessarily in a cumulative way, by intensifying existing inequalities.

Besides putting the problem of spatial disparities in a new framework of interpretation, contributions to the Marxist concept of uneven geographical development since the 1970s also turned the attention to other crucial aspects of the issue that had attracted relatively little interest before. Of special importance here are the theories concerning the problem of *scales*. As we have presented in previous sections, most approaches to spatial inequalities have concentrated on certain scales at the expense of neglecting others. For example, Western mainstream concepts that came into being during the Cold War had their focus on global and national scales, thus, on disparities between countries and regions (cf. Sect. 6.3). The same went for the concepts of Lenin and Stalin, while most dependency theories dealt

predominantly with global scale. Theories such as that of Frank and Wallerstein, which took basically equal interest in more than two scales, were rare. And even here, the question of scale itself and its theoretical considerations gained little attention.

The concepts of uneven geographical development, however, threw new light on the issue. In the early 1980s, Taylor (1982) presented a three-stage model similar to that of Wallerstein, differentiating between local, national and global scales. This essay contained important innovations. First, its author attempted to theorize the mutual relation of the three scales, a question neglected in concepts about spatial inequalities written by economists and sociologists. Second, he suggested that these scales were not pre-given, but rather socially produced. In fact, the question of spatial hierarchies and scales was also mentioned by Harvey (1982, especially pp. 422–424), although yet not in detail.

These ideas had a significant influence on Smith's (1984) book *Uneven Development*, which put great emphasis on the problem of geographical scales. Smith acquired the concept about the social construction of scales, but rejected that any scale would have a prior rank relative to others. Instead, he regarded the relation of scales as dynamic, while suggesting that the claimed dialectic of equalization and differentiation in capitalism might appear on various scales. For tendencies of the 1970s and early 1980s, his opinion was that equalization mostly took place on the global scale due to deepening political and economic integration, especially under the aegis of US-led international institutions such as the IMF and the World Bank. Meanwhile, Smith considered the urban scale as undergoing remarkable differentiation due to the rapid post-Fordist economic boom in certain agglomerations parallel to the decline of districts of "old industries". This idea opened a new field in spatial disparity research, where the focus is on how inequalities "jump" the scales or how they are shifted from one scale to another in a kind of "scaled politics" or "politics of scale" (Swyngedouw 1997a, b). And it also provided ammunition to the Marxist criticism on the capitalist system since a new sort of disparities (induced by scalar mechanisms) could be described and blamed on capitalism.¹⁶

Altogether, the concept of uneven geographical development has raised many crucial questions since the 1970s, and has thus become an important approach in the spatial disparity discourse. On the one hand, it has turned the attention to many aspects of spatial inequalities that were rather neglected in the decades before. Hence, it has made important contributions to a more sophisticated understanding of the issue. On the other hand, it has had a major political role as well since it has put a new weapon in the hands of the critics of capitalism. Although the idea to blame all existing forms of spatial disparities exclusively on this mode of production is not new, it is a main innovation of the uneven development concept, whose

¹⁶ Although, just as it is not uncommon in the case of new research issues, increased interest in scale led in some cases to an overemphasis of the topic or to "scale fetishism" (cf. Belina 2008).

representatives use arguments that seem highly relevant for the recent age, both for global centers and peripheries.

In an interesting way, however, this approach broke with the strategy otherwise typical for most contributions to the spatial disparity discourse. It does not aim to propagate orientation knowledge by taking advantage of (or misusing) the legitimate authority of “objective” science, but it rather tends to question the existence of the latter. In this sense the key theoreticians of uneven geographical development went back to the ideas of Marx, who “saw ‘knowledge’ as the polite word for competing *ideologies* that serve specific societal interests” (emphasis in original; Castree 2008, p. 63). This view has been internalized by Harvey as well, who stressed that knowledge was “a social product” (Harvey 1982, p. 101), and that “each mode of production evolves a specific kind of science, a ‘knowledge system’ appropriate to its distinctive physical and social needs” (ibid.). For this reason science also lost in this interpretation the claim of “objectivity” and the exclusive status many attributed to it over the last few centuries. It was no longer considered a superior “mode of understanding” (Mercer 1984, p. 194). And this new attitude to science has indeed been taken seriously: the claim of law-like quality of any sort of knowledge is rejected even if this claim were that of Marx. This is well exemplified by Harvey’s words, emphasizing that “we should be chary of attributing absolute and unchecked powers” to “Marx’s ‘law-like’ statements” (Harvey 1982, p. 139).

This firm and consistent attitude, however, does not mean a profound demise of science and the relevance of scientific research. The standards scientific work is expected to meet have changed, however. For most social scientists over the last few centuries, even in the spatial disparity discourse, the main criterion for the claim of scientific quality was (empirical) verification. The representatives of the uneven development concept have given up this expectation and introduced another one, that of moral. For Harvey, for instance, “the issue of validation” in Barnes’s (2006) words is “less one of truth or falsity than finding theoretical knowledge *that changes the world for the better*” (our emphasis; p. 38). Basically the same goes for Neil Smith, whose interpretation distinguishes “science” and a desirable “critical science” along moral aspects. In his eyes “the ideological function of science has generally been to make specific social relations appear natural, even inevitable” (Smith 2008, p. 276), thus, to present the “contradictions” of capitalism as if they were universal laws independent from economic and social circumstances (such as the mode of production). “Critical science”, however, is expected to be free from this “bourgeois” bias.

The idea to give priority to moral suggestions over what Barnes (2006) calls “classical verification” (p. 38) in scientific research implies the clear break with the “cyborg science” (Barnes 2008) of the Cold War period as well as with the “technocratic” science of neoliberalism. And this shift can easily be presented as a hallmark of new leftist approaches in social sciences, and as a specific feature of the uneven development concept among the great deal of theories in the spatial disparity discourse. This argument has a strong political relevance. The decades of Fordism led in the eyes of many to the emergence of “big science” serving “higher interests” instead of those of everyday people. Furthermore, for many this

“tradition” seemed to continue in the neoliberal phase, where these “higher interests” might be less military and more economic, but their relevance for the lived lives of individuals is claimed to be similarly limited. Marxist approaches in general, and the concept of uneven geographical development in particular, however, can create for themselves the image of “changing the world for the better”, thus, of being “just” and “righteous”. In other words, the source of legitimate authority for them is not the quality of being verified or verifiable in “classical” sense, but that their main principle is to fit their research practice to the interest of people.

This apparently attractive endeavor, however, suffers from a serious problem since there are no universal criteria to assess what “changes the world for the *better*” exactly means; that is, what is “better”. This normative judgment has in fact no relevance if one does not define clearly “for whom” and “from which aspect” something is regarded as better. Furthermore, even if these additional issues are taken into consideration, it is doubtful whether there is a “point of nowhere” (Nagel 1986), from where *anybody* could say *what* would be better *for whom* and *from which aspect*. Here we can refer to the remarks of Fraser (2000), Schlosberg (2004), and Young (1990) about “spatial justice” that we cited in Sect. 2.1. For them, one can only speak about “justice” if those affected by the distribution of a given resource are recognized as being concerned, and if they are allowed to effectively participate in the decision-making about distribution. In our view the same goes for deciding what would be “better”: such a judgment about changes can only result from a discursive process where everybody who might be concerned with these changes is involved. Otherwise, normative categories like this have little meaning in themselves. “Changing to the better” only becomes meaningful if it is clear “for whom” and “from which aspect” the issue is interpreted, and the final assessment whether something is “better” or “worse” can only be made in the light of the opinion of those concerned.

As Castree (2004) underscores, this point attracted considerable criticism especially from feminist (and, apparently, postmodern) authors, who stressed that in his book Harvey interprets the world and distinguishes “good” from “bad” as if these were categories with universal meaning. In Deutsche’s (1991) words, Harvey’s reasoning is based on “totalizing visions of society”, on “dreams of unity” (p. 7), or, for Morris (1992), on “a totalizing Marxism” (p. 275), which gives the false suggestion that normative categories can likewise be totalized and interpreted from a single point of view. Hence, although Harvey explicitly argues against “attributing absolute and unchecked powers” to “law-like” relations “big science” just too eagerly produces, his work seems to end up with the same problem. As Deutsche (1991) put it: “Claiming to discover, rather than construct, a reality that forms the absolute foundation of social unity, the subject of Harvey’s discourse generates the illusion that he stands outside, not in, the world” (p. 7). The same issue emerges with regard to Smith’s 1984 book, which in Phillips’s (2008) words “visibly aspired to be ‘grand theory’, and as such can be subjected to criticism for being both *totalizing* and *insensitive to difference*” (our emphasis; p. 78).

Such a “totalizing” conceptualization of the world also means a sort of oversimplification. This stands for these works’ implicit suggestion about the existence of a universally valid approach, which remarkably oversimplifies the great complexity of ways of seeing one can adopt to get an understanding of social phenomena. As Massey (1991) underscored, a satisfactory explanation of social issues cannot be given if one tries to reduce these to a few simple mechanisms. For instance, in her words “it is *inadequate* to try to explain the condition of postmodernity . . . simply as the result of ‘time-space compression’, as Harvey does” (our emphasis; p. 33), or to come to terms with social tensions “by forcing all struggles under ‘the overall frame of . . . class politics’” (p. 55).¹⁷ And the fact that Harvey’s narration was “profoundly reductive in impulse” (Morris 1992; p. 255) led in a strongly-worded interpretation to “the apparent irrelevance of [his] theory to real-world situations” (Dennis 1987, p. 310).

Of course, it is a fundamental question for the whole of social scientific research whether “grand theories”, with the claim of a sort of universal relevance, could be a useful means in scientific research, or instead “theories of the middle range” (Merton 1968) should be preferred, which might lack the same simplicity and universality but have stronger empirical foundations. A similarly crucial issue is to what extent simplifications and generalizations are tolerable in theoretical concepts, which otherwise are necessarily unable to catch every detail of the incredibly complex phenomena they refer to. In our view, however, it is not the task of this essay to provide an in-depth discussion of these questions. What we instead find highly relevant from our point of view is the *political implication* of the generalizations that are made in the concept of uneven geographical development.

In fact, the simplifications in Harvey’s work that Massey leveled criticism at are common in their tendency to suggest the “contradictions” of capitalism cause all of the problems in our current society, especially uneven development. That is how all challenges can be traced back to “contradictions inherent in capitalist production and exchange” (Harvey 1982, p. 193). This has two consequences. On the one hand, this argumentation suggests that uneven geographical development is necessary in capitalism, so that this *problem* cannot be cured in this mode of production. On the other, a claimed solution is also offered. According to Harvey, the capitalist system is “inherently unstable and crisis-prone”, where “though each crisis may be resolved through a radical re-structuring of productive forces and social relations, the underlying source of conflict is never eliminated” (p. 103). For this reason, “the only ultimate resolution to the contradiction lies in the elimination of their source, in the creation of fundamentally new social relationships – those of *socialism*” (our

¹⁷ We should underscore here that Massey’s negative attitude did not only go to Harvey’s concept but to “grand theories” in general. Her works rather mirrored a stance that Cochrane (1987) formulated as “there do not seem to be any *general rules* – or necessary relations – at all” (our emphasis; p. 361). This was a main reason that Massey distanced herself from formerly mainstream concepts in economic geography, usually concentrating on the macro level and seeking universal regularities, and shifted to a relational approach with a micro level focus (cf. Phelps 2008; Bathelt and Glückler 2011, pp. 5–7).

emphasis; *ibid.*). In other words, the problem of uneven geographical development is interpreted as an unavoidable outcome of capitalism, and this idea is used as a strong argument against capitalism. Meanwhile, since socialism is presented as free from the contradictions of capitalism, it is also suggested to promote an even spatial development, a claim that strongly implies a sort of moral superiority of socialism. Hence, it seems a legitimate conclusion that “it is time for capitalism to be gone, to give way to some saner mode of production” (p. 445).

In Smith’s essay, which is similarly “totalizing” in Phillips’s (2008) words, simplifications and generalizations have basically the same role. Just as Harvey, Smith also comes to the point that “the uneven development of capitalism is structural” (Smith 1991, p. xiii) since it is “the systematic geographical expression of the contradictions inherent in the very constitution and structure of capital” (*ibid.*). Furthermore, Smith explicitly claims that “the resulting geographical patterns are thoroughly determinate (as opposed to ‘determinist’) and are thus *unique to capitalism*” (our emphasis; *ibid.*). Thus, uneven development is presented here as “the hallmark of the geography of capitalism” (*ibid.*),¹⁸ which implies that it does not exist in “more developed” modes of production, namely in socialism, which is instead aimed at “the abolition of uneven development” (p. 154).

In fact, these simplistic but straightforward political arguments *for* socialism and *against* capitalism would be impossible without, using the words of Massey, “forcing all struggles under the overall frame of class politics” or explaining the underlying complex phenomena “simply as the result of time-space compression”. This is a point where the key works of the uneven development concept, especially their simplistic political claim, can be prone to criticism. We find it important to underscore, however, that if a concept is based on remarkable simplifications, it does not mean necessarily that its main implication is wrong. In other words, although the concepts of Harvey and Smith might seem to force all phenomena of society into a few typically Marxian categories and schemes, this is not enough in itself, even if it can indeed raise concerns, to firmly state that their findings are necessarily incorrect and misleading. In our view, a decision about whether uneven geographical development is indeed a “hallmark” of capitalism needs further investigation, since there are at least three theoretical opportunities to falsify the concept.

The first direction would be to display that capitalism does not produce spatial disparities. This option is, however, profoundly theoretical since we do not believe that the existence of uneven spatial development under capitalist circumstances could be questioned reasonably. Instead, we find this phenomenon obvious. The second opportunity would be to reveal that spatial disparities in capitalism are produced not in the way Harvey suggests in his ground-breaking work, so that his

¹⁸ Smith uses even more dramatic formulation in other works, speaking about the geographical pattern of uneven development as “the satanic geographies of globalization” (interpreting globalization as a strategy as well as outcome of the neoliberal phase of capitalist development) (Smith 1997).

concept fails to reveal real reasons. Third, one can assess whether the mechanisms presented by Harvey, which are claimed to promote uneven spatial development in capitalism due to its underlying “logic” of profit maximization, would likewise emerge in a socialist, non-profit oriented system and would similarly lead to spatial disparities. In our essay, among the second and third options we first focus on the third question, thus, to the existence of uneven geographical development in socialism. Thereafter we will make a few brief remarks on the second issue concerning the validity of Harvey’s concept for the reason of spatial disparities in capitalist systems.¹⁹

8.2.2 Remarks Regarding Blaming Uneven Development on Capitalism: An Empirical Investigation of “Real Existing Socialist” Countries

For analyzing uneven geographical development in socialist systems and “testing” Harvey’s concept about it, the main challenge is to find utilizable information about the “geography” of socialism. This is a crucial prerequisite to decide whether the mechanisms identified by Harvey or some logically analogous “socialist counterparts” also function in this mode of production and produce spatial disparities there. The task can be completed at least two ways. The first option is basically theoretical. One can rely on accessible concepts about socialism and its spatial patterns, and investigate whether the mechanisms presented there can be compared to those described by Harvey for capitalism. The second strategy has an empirical orientation. Here, the empirical data on economic growth and spatial inequalities in former countries of “real existing socialism” can serve as valuable raw material. Both possibilities raise, however, several questions, about which there is much debate in the literature. For this reason, before choosing among the two options, we have to make an overview of related ambiguities.

With regard to geographically relevant theories about socialism, they are in fact too indefinite to form the basis for sketching up a “geography” of this mode of production. This is well exemplified by the works of Harvey and Smith, which at several points stress the necessity of a socialist turn to put an end to capitalism, but provide very few and sometimes blurred explanations of how the desired socialism would look and function. For Harvey, the main information given about socialism is that Marx’s “plea for the transition” to it is based “upon the need to cure the gross irrationalities that arise out of the burgeoning contradiction between growth in the productive forces and the social relations upon which the capitalist mode of production is based” (Harvey 1982, p. 120). This makes clear that socialism is

¹⁹ According to our knowledge such an investigation of Harvey’s concept has not been provided yet in the literature. For this reason we will give a more detailed analysis here than for most other theories concerned in the thesis, which have been investigated in a great many books and articles.

claimed to be free from all “contradictions” of capitalism. Given that Harvey’s book gives a comprehensive overview of these “contradictions”, one can indirectly identify many features socialism does not have in his view. For instance, its main “engine” is not the capitalists’ need to realize profit, thus, “accumulation for accumulation’s sake” (words cited from Marx; p. 29). It is not based on the capitalist exploitation of certain social classes. And, among others, it does not produce the capitalist form of uneven development. Furthermore, it is also suggested that instead of profit realization the main goal in socialism is the growth of productive forces (thus, economic growth) without the obstacles posed by capitalism. These pieces of information, however, only address the claimed pros of socialism, without revealing how it would function, thus, how these positive outcomes could be achieved. In this sense Harvey’s essay has important similarities with the works of Marx, who elaborated a very sophisticated concept about what he considered as the contradictions and problems of capitalism, but he neither provided “tangible” ideas about the functioning of socialism nor did he give exact instructions how to establish it.²⁰

In general the same goes for Smith’s book. For him, “the struggle to equalize away class relations will lie at the center of socialist history” (Smith 1991, p. 154). This shall also put an end to capitalism’s “blindness to the distinction between use-values and exchange-values” (ibid.), thus, to an era where “value” and “necessity” is defined by the market as profitability. Instead, a new phase shall come, where the capitalist “control of the exchange-value system” (p. 64) is overthrown, as well as its ability to control society. Under these new circumstances, it is for Smith “social control to determine what is and is not necessary . . . what is and is not value” (ibid.). Hence, necessity is judged “according not to the market and its logic but to *human need*, according not to exchange-value and profit, but to use-value” (our emphasis; ibid.). This is claimed to cease the contradictions of capitalism and open up a new era hallmarked by “the abolition of uneven development” (p. 154).

Just as in Harvey’s essay, however, it remains unclear how these circumstances could be created and how socialism would actually function. For example, it is not explained what “social control” would exactly mean, e.g. who would have the right to influence decisions, who would make these decisions *in fact*, and how it would be guaranteed that those having the power fully take into consideration the preferences of others as well. (In other words, how the emergence of a dogmatic and authoritarian vanguard party could be avoided.) Hence, it is also unclear how the “value” of something could be assessed and how “human need” as such can be defined. But these are crucial questions since the meaning of “value” and “human need” is not naturally given but socially constructed, thus, it is not universal. It varies instead from context to context, from person to person and from time to time (just as in the case of “merit” and “award”; cf. Sect. 2.4).

²⁰ This serious shortcoming in Marx’s concepts was also underscored by Lenin in the first years to establish the Soviet Union, as it was pointed out by Popper (1945, vol. 2, p. 79) in his remarkable but otherwise rather one-sided critique of Marx.

Furthermore, even in the same temporal and spatial context the “value” of a good, an act or an idea, for instance, cannot be assessed in general. One should also define from which aspect and compared to what the value is measured. In a poor agricultural country where insufficient food supply is a burning problem, the value of modernist policy measures like the “green revolution” can be very high from the aspect of food security. From the view of environmental protection or cultural diversity, however, the same initiatives have much less value than promoting traditional forms of agriculture, which may achieve lower yields, but which are environmentally and socially more sustainable and, hence, have definite pros in the long term. For this reason, the value of a subsistence economy compared to mechanized large-scale agriculture can only be assessed from various aspects, not in general.

Besides, even if one neglects the role of the context and that value can only be judged from certain aspects, it is still problematic to decide what “human need” and “value” is since different individuals might (and usually do) have different opinions about the issue. Thus, if the goal is a “social control” over judging “necessity” and “value”, a crucial question is to what extent individual views are taken into consideration while “values” are defined, and who has the right and power to exert more or less influence on such debates.

These are all crucial issues which one should come to terms with and regulate before a “social control” over defining “use-values” is introduced. We do not deny, of course, that certain mechanisms can be developed for this sake, which might enable an adequate, though not perfect, “social control” over similar issues. But in fact the theoretical works we presented have no definite suggestions with regard to these questions. This remark goes again not only to the concepts of Harvey and Smith, but to most theoretical works on socialism, whether they are those of Marx and his followers (cf. again Popper 1945, vol. 2, p. 79) or of the anarchist critics of Marx, such as Bakunin (cf. Meusburger 1997). The only exception is constituted by some writings of Lenin and other prominent leaders of “real existing socialism”, e.g. Joseph Stalin, who as active politicians could not neglect such practical questions. This means, however, that beyond the concepts of communist political leaders other theoretical works do not provide an in-depth explanation of the claimed functioning of socialism. Thus, if the works of those personally involved in “real existing socialism”, in fact, communist dictatorships, are not taken into consideration, the idea to “test” Harvey’s concept for theories about socialist systems seems impossible to put into practice.

The second way we suggested seems much more viable: namely, to investigate the actual functioning of “real existing socialist” systems, and to search for mechanisms similar to those that Harvey identified as reasons for spatial inequalities in capitalism. The advantage here is that these systems indeed existed, so there is a considerable amount of information about their inherent mechanisms and spatial practice. Yet, this solution is also prone to criticism since many leftist

theoreticians dispute whether these systems were indeed “socialist”.²¹ As Meusburger (1997) underscores, they tend to stress that “state socialism” in countries of the former Communist Bloc had nothing to do with the ideas of Marx, nor with the “pure” socialism and communism he envisaged. Instead, these are considered to be distorted by Lenin and especially by Stalin.

No doubt, Lenin and Stalin certainly added a great deal of (often controversial) ideas to the original concept of Marx. In this sense it would be highly unsubstantiated to claim the Stalinist Soviet Union, for example, to be either “pure socialism” or a direct and necessary outcome of Marx’s works. Two issues are worth consideration here, however. First, “pure” capitalism has never existed in any country. State regulation in economy, taxes that one pays to the state, investments funded by the state, without a doubt, are present in every capitalist system. The United States under the Reagan administration or Margaret Thatcher’s United Kingdom were also no exceptions, not to speak of other countries of the European Union, often called in the Marxist literature a gigantic neoliberal project (an overview of similar views is provided by Birch and Mykhnenko 2009). Yet, disparities observed in these countries are tendentially presented as outcomes (what is more, “necessary” outcomes) of neoliberal capitalism, which is in fact present here not in its pure form, but with certain “distortions”. Hence, it seems a justifiable analogy to consider the systems in countries of “real existing socialism” as socialist, even if not “purely socialist”, given the remarkable differences they had in comparison to the capitalist world. Some striking examples are the almost profound collectivization of private property, an absolute lack of competition in many spheres of the command economy (such as in the labor market with its artificial full employment or “unemployment behind the gates”²²), and the price system dominantly shaped by decisions of the communist party instead of market processes.

Second, the works based on the concept of “uneven geographical development” commonly remain silent on “real existing socialism”. Neither do they provide an interpretation suggesting that spatial disparity did not exist in these countries, nor do they explain why these systems, if they were not free from inequality, cannot be regarded as socialist. In the light of this remarkable silence it seems a legitimate project to consider these systems as socialist, and investigate their inequalities as products of a socialist regime. That such an attempt has relevance is also indicated by the fact that even those leftist thinkers condemning Stalinist dictatorship with all its inhumane features tend to approve several “achievements” of this system as “socialist” or “communist”. In other words, their disagreement about claiming systems of “real existing socialism” to be socialist or communist usually ends as

²¹ For a brief overview of various theoretical interpretations of “real existing socialist” systems see Kornai (1992, pp. 9–11) and Csanádi (2006), pp. 3–8.

²² Since Marxist ideology put great emphasis on the individual’s right to work, in “real existing socialist” countries the right to have a workplace was considered as crucial. Hence, these regimes sustained full employment by artificial measures, meaning in fact that many had a workplace, but not reasonable work. This phenomenon was commonly referred to as “hidden unemployment” or “unemployment behind the gates”.

soon as they find in these systems something that seems for them to fit the Marxian concept.

And this is not only the case for some “Eastern” Marxists, who either actively participated in these dictatorial regimes or were forced to praise it, but even for a great many Marxist theoreticians in the “West”, who were obviously never pressed to express such views. We already referred to Baran (1957), for whom it was “a grievous fallacy to conclude from” the Stalinist “cult of personality” and the acting of some “evil personalities” that “*socialism* is the ‘entire system’ that needs to be repudiated” (emphasis in original; p. viii). This formulation also indicates that for Baran it was no question that the Soviet system was a socialist one. Furthermore, he even regarded several dictatorial attempts of Stalin in this “real existing socialism” as tolerable in the light of “foreign aggression” and “internal resistance” (ibid.). The same point was made by Angotti (1988), for instance, who exerted criticism on certain elements of post-war Stalinism, but judged these as “understandable and in a historical sense even ‘necessary’ in the 1930s and during the Second World War” (p. 33), and for whom the Stalinist phase was “not some sort of ‘deviation’ from socialism” (ibid.), but an example for it. We can also refer to those Marxist geographers who have the same view. In Cox’s (2002) words, for example, “*communist experiments*, whether those of the Soviet Union or of China”, although they “proved no match for capitalism’s ability to raise material standards”, “they achieved *considerable success* in terms of equalizing life chances and securing a minimum in housing, healthcare, and nutrition: levels of achievement that have still to be attained in the most prosperous countries in the contemporary world, and a *success* for which they are *given scant credit* by the Western media and politicians” (our emphasis; p. 368).²³ To sum it up, even among theoreticians on the radical left there are many who regard “real existing socialism” as socialism indeed, while the same view among non-socialist thinkers is quite predominant. Given these considerations it seems an analytically legitimate project to have a closer look at the systems that existed for several decades with the self-claim of being socialist, and to see whether the mechanisms identified by Harvey for capitalism had their counterparts there.

While investigating potential similarities and analogies, the first point we have to take into consideration is the claimed inherently controversial nature of capitalism, which in Harvey’s view makes it prone to crises. As we presented earlier, Harvey internalizes the Marxian idea that capitalists are focused on increasing their profits, which they try to achieve by decreasing production costs. This means on the one hand the promotion of continuous technological and institutional innovation, which reduces the relative labor costs of production. On the other hand they try to keep the wages of workers as low as possible. These attempts reduce, however, not only

²³ In our view these interpretations are at least remarkably one-sided and morally hard to accept in the light that these systems physically destroyed tens of millions of human beings in peacetime, who were deprived not only of “a minimum in housing, healthcare, and nutrition”, but even of their personal freedom or of the fundamental right to live (cf. Courtois et al. 1999). (In the forthcoming paragraphs we will pay more attention to these issues.)

production costs but consumption as well, since workers with low income have limited resources to buy goods and services. The outcome of this contradiction is relative overproduction, which results in a decreasing rate of profit. Under such circumstances a certain part of capital is not invested, because it cannot return a sufficient level of profit. But having the capital unused is also not a desirable strategy since, although it does not produce losses, neither does it generate profit. For this reason, capitalists try to find alternative opportunities to keep the rate of profit high, thus, to open up new possibilities of investment to avoid the crisis of overaccumulation. This actually means that they look for strategies enabling the maintenance of and, if possible, increase in consumption.

In the view of Harvey and, in fact, Marx, this problem only concerns capitalism. They claim however that socialism is free from it, because the collectivization of forces of production sweeps away class differences, and production is no longer subordinate to the particular interests of capitalists. Instead, it is regarded as bringing into being a system where the increase in the well-being of the population through growing production is not constrained by such “unjust” factors. As we presented in Sect. 5.4, a very similar argumentation was that of Stalin, for whom the “basic economic law of socialism” was “the securing of the maximum satisfaction of the constantly rising material and cultural requirements of the whole of society through the continuous expansion and perfection of socialist production on the basis of higher techniques” (Stalin 1972[1952], pp. 40–41). At this point, however, one can identify a contradiction not less serious than the one Harvey claimed to be inherent to capitalism. If the goal is to achieve a high and “constantly rising” level of social well-being, the system has to increase production, which necessitates growing investments. But focusing resources on investment means in the meantime that the same resources are lost for consumption, which hinders “the maximum satisfaction of the constantly rising material and cultural requirements of the whole society”.

If one tries to reveal underlying mechanisms of this contradiction, similar problems can be found as in Harvey’s interpretation of capitalism. For Harvey, capitalists promote technological development and institutional innovation, and keep wages low to reduce production costs. In fact, “real existing socialism” did the same in order to mobilize as many resources as possible and concentrate them on production. It is not by accident that communist leaders were eager to emphasize the importance of “higher techniques” and to present their system as a torchbearer for the technological advance of humanity. From this aspect the Soviet project itself can be interpreted as a gigantic experiment to put in practice the imperative in *The Internationale*, anthem of the international socialist and communist movements: “of the past let us make a clean slate”.²⁴ The experiment attempted to break with all problems of the “old world”, and to build a “new” one. A cornerstone here was the endeavor to introduce revolutionary methods in the organization of economy, and

²⁴ The main features of “real existing socialism”, which we first present through the example of the USSR, were to large extent similar in the Soviet satellite countries in Eastern Europe as well as in the Maoist China, as will be discussed in later parts of this section.

to utilize state-of-art technology on an internationally unprecedented scale. These objectives became explicit in the first years after the socialist revolution. Lenin strove to put Soviet economic production on the basis of central planning, where he considered the German war economy in World War I as the example to follow (Heller and Nekrich 1981, p. 213). This led in 1920 to the establishment of Goelro (*Gosudarstvennaya Komissiya po Elektrifikatsii Rossii*, “The State Commission for the Electrification of Russia”), whose main responsibility was to coordinate the electrification of the country. But in fact this commission also concerned planning in some other branches of mining and heavy industry; thus, it can be regarded as the first industrialization plan of the communist state (Horváth 2008). The institution soon underwent rapid development and in 1922 it was converted into Gosplan (*Gosudarstvenniy Komitet po Planirovaniyu*, “State Planning Committee”), which became the ultimate planning bureau in the USSR, responsible for all economic branches (Cohn 1970, p. 12). In fact, Goelro and the early Gosplan did not produce operational plans, their role was rather to draw up guidelines for general economic policy, thus “indicative planning” (ibid.). Still, they opened a new phase in economic coordination, not only in the Soviet Union but in an international sense as well. Furthermore, operational plans also arrived soon. In 1926, work began on a long-term and in-depth “General Plan” (Moravcik 1961), which was finished as the First Five-Year Plan for the period 1928–1932 (Heller and Nekrich 1981, pp. 213–221). From then onwards, the Soviet economy functioned as a centrally planned system, coordinated through five-year and seven-year plans²⁵ until the collapse of the USSR in 1991. Similar planning mechanisms were introduced later on in all countries to join (or to be forced to join) the Communist Bloc, in Eastern Europe as well as in Asia.

Besides putting production under central planning, the Soviet leadership also attempted to adopt state-of-art modernistic principles in economic coordination as well as up-to-date technologies in production. For this reason they launched intensive cooperation with many capitalist countries and some of their leading companies, although such projects often remained invisible for the broad masses. Right after the proclamation of the USSR considerable cooperation began foremost with Germany, which resulted in technology transfer to the communist country through engineers and technicians, and even in the establishment of heavy industry plants (mostly of a military profile). These collaborations enabled Germany to conduct strategic development projects otherwise impossible at home due to the regulations of the Versailles Peace Treaty. But it was beneficial to the USSR as well since precious pieces of knowledge “trickled down” to the Soviet economy and military (Heller and Nekrich 1981, pp. 199–200). Later on, the focus of cooperation shifted to common projects with US companies. By 1929, the number of technical agreements with American firms increased to 40 (Sutton 1968, p. 347). Of course, enterprises from many other capitalist countries were likewise present. Thanks to

²⁵ The only seven-year plan, which was an initiative of the Khrushchev administration, was carried out between 1959 and 1965.

these programs, “at least 95 percent of the industrial structure” in the USSR received foreign technological assistance (p. 348).

And the Soviet leadership not only made great efforts to adopt the technology necessary for production, but also to utilize state-of-art Western knowledge on how production facilities should be constructed and organized. Hence, in 1928 the USSR initiated a gigantic common project with the most acknowledged global company in industrial architecture of the time, Albert Kahn & Co. in Detroit, to draw up the plans for a series of large-scale projects in the Soviet Union, amounting to two billion USD (Fainsod and Bernier 1958, p. 215 cited in Heller and Nekrich 1981, pp. 220–221). Other bureaus in North America and Western Europe were also involved in similar initiatives. These collaborations resulted in plans for and construction assistance in the erection of the first planned Soviet industrial towns, Magnitogorsk and Kuznetsk, plants in the manufacturing industry (e.g. the car factory in Nizhny Novgorod and the truck plant in Yaroslavl), and hydropower stations (Heller and Nekrich 1981, p. 221).

The motivation behind all these projects was exactly the same as what Harvey presented as a main strategy of capitalists to increase profit, and what was apparently done likewise in “real existing socialist” systems to accelerate production. The Soviet leadership aimed to introduce new, innovative technologies and organizational methods, thus, to carry out a technological shift in order to gain advantage over rival countries. As Sergo Ordzhonikidze, then Commissar of Heavy Industry put it: “Our plants, our mines and our factories are now *equipped with a technology no other land owes* . . . Where did we get that from? We have bought from Americans, Germans, French and English the newest machines, the latest technological achievements, and furnished our enterprises with them. . . . And they still have many plants and mines equipped with machines from the turn of the century” (our emphasis; cited in *ibid.*).

The Soviet project also put great emphasis on the introduction of revolutionary methods in organizing and even training the labor force in order to accelerate economic growth. Since humans were regarded as “the most important force of production” (Abella 1961, p. 123), it was crucial to reshape them in line with communist concepts. Hence, the drive to make the USSR the most efficient system of production resulted in a thorough reorganization of the education system. As Sáska (2005) underscores, the new Soviet leadership banned “bourgeois” principles and methods in education without delay, and put the whole process on a brand new conceptual basis. The new objective was to create the “new socialist type of human”, which would be able to construct the “society of equals”. In fact, actual measures taken to achieve this goal were different in the early years after the revolution and from the 1930s onwards. During the 1920s, emphasis was rather put on the promotion of progressive pedagogy and on the idea of “the necrosis of school” (p. 85), where pupils were expected to learn mainly not from teachers but from their own experience gained while solving practical problems on their own. This concept, which was strongly backed by Lenin and Trotsky, was soon given up after Stalin had come to power. The new approach put in its forefront the education of youth in a strongly hierarchized system along the principles of military-like

discipline, with strong emphasis on the mediation of “socialist” knowledge and on a total refusal of “bourgeois” knowledge. But the main underlying political goal was basically the same: to create “children able to fulfill their vocation in the society of workers” (ibid.), hence, to “free” education from its “bourgeois” heritage and thoroughly transform it in concert with the goals of the Soviet leadership. In other words, Leninist and Stalinist attempts in education, although different at many points, were common in their objective of a radical reorganization of education system to produce a more efficient and politically more “conscious” labor force in order to increase production.

Similar strategies of “controlling the mind” (p. 86) and indoctrinating the population with a mixture of socialist and modernist ideologies were present in cultural attempts as well, namely in the “bolshevization of culture” and the promotion of “proletarian art” (cf. Clark et al. 2007). Architecture was especially important here since its objective was dual. On the one hand, it was expected to radiate the superiority of socialism in its very style, while on the other it was responsible for creating the spaces of work optimized for the increase of production. No wonder that both endeavors became manifest in the way new “socialist industrial towns” and the districts of old cities transformed along socialist principles were planned and constructed.²⁶

For organizational issues aimed at the increase of production, Trotsky and the Bolshevik theoretician Nikolai Bukharin urged right in the early years of the Soviet system for the “militarization of labor” (Heller and Nekrich 1981, p. 216). This was to mean a strong central control over the whole of the labor process and the coordination of the workforce along military principles. Although these ideas did not meet full support, and their promoters were exiled (Trotsky) or executed (Bukharin) before the 1930s ended, ironically, the First Five-Year Plan of 1928–1932 witnessed how they were put into practice. Not only were strikes banned in the Soviet system, but virtually everyone failing to meet the expected (and often unrealistic) level of quantity and quality of work could easily be judged as a “saboteur”, the “agent” of “reaction” and “class enemy”. Punishment for those not doing their “duty” on the “front of labor” was often as severe as those in war. Hence, a worker could soon find himself/herself in prison or in a forced labor camp (pp. 219–220).

Beyond promoting technological development and institutional innovation in order to increase production, the socialist system had another important similarity to Harveyian capitalism. It also tried to keep wages and other forms of workers’ income low since this was a major opportunity to raise the amount of resources that could be invested. Official propaganda, in fact, remained silent about these problems and news tendentiously drew up the image of a country with steadily growing well-being of the population. Western calculations, however, suggested a remarkable and long-lasting decline in wages. The works of Chapman (1954, 1963), which were predominantly based on official Soviet statistics on wages and

²⁶ A detailed overview of these issues is given by Budantseva (2007).

price indices, suggested that during the First and Second Five-Year Plans (thus, between 1928 and 1937) real wages declined by an annual rate of 6.2 % (!). For the late 1930s (1937–1940) a 2.1 % decline was calculated. In consequence, per capita real wages in 1940 only reached 54 % of their 1928 level.²⁷

A characteristic form of keeping wages low was the gradual reduction of the income of those affiliated with non-material activities, which were often considered as “non-productive”. This meant white-collar office personnel as well as teachers, physicians, those working in service industries, and in many cases even engineering and technical personnel. The average earnings of engineering and technical personnel was, for instance, 2.63 times higher in 1932 than the average wage of workers. After a continuous decline, however, this ratio decreased to 1.75 by 1950. For “employees”, who mostly were “white-collar office and accounting personnel”, the same ratio decreased in the same interval from 1.50 to 0.93 (!) (Yanowitch 1963, p. 688). In other words, what Stalin called the “abolition of the antithesis . . . between mental and physical labor” (Stalin 1972[1952], p. 24) meant in practice an intensive inflation of the wages of non-physical workers. In these sectors, of course, there were also exceptions, especially in certain top positions where an unquestionable loyalty to the Party was crucial. Even in the late 1950s, for instance, the director of a steel plant had a salary almost ten times that of a secretary, while the same ratio for a director of scientific research institute and a secretary reached 14.6 (Yanowitch 1963, p. 693).²⁸ But these extreme values were indeed exceptional, and did not balance the overall reduction in real earnings of mental workers, not only in a temporal sense but also compared to workers’ wages.²⁹

Wage constitutes, of course, only one segment of individual revenues, so it can only give a limited insight into the real level of the population’s material standard of living. This point is especially important if one deals with “real existing socialist” systems, where a considerable part of individual revenues was provided in non-fiscal form. Taking this aspect into consideration, however, does not make the situation seem different in the USSR during the 1920s and 1930s. In 1929 a ration system was introduced for bread, and later gradually for most sorts of food and industrial goods as well (Heller and Nekrich 1981, p. 216). Another form of reducing wages was to increase the norm of production per workday for the same payment. This could mean on the one hand that the compulsory norm rose. On the

²⁷ Of course one shall always be cautious about assessing such estimations since their actual reliability is difficult to measure. It is worth noting, however, that Chapman’s cited works were and still have been considered as reliable by most authors on wages in the USSR (cf. Nove 1966; Cohn 1970).

²⁸ Not to mention the many informal benefits those in leading positions could take advantage of, even if only indirectly. For example, factory directors had many additional revenues most workers could not even dream about, from the free use of official car (with chauffeur) to the easiness of spending vacation in the most luxurious hotels for key functionaries, the *nomenklatura*.

²⁹ Agricultural workers also suffered much from a radical reduction in their revenues. These were manifest, however, mostly in non-fiscal form. Hence, this issue is investigated in later parts of this section.

other, “labor competitions” were launched, where official propaganda tried to fuel workers’ enthusiasm to serve the construction of socialism by producing more than expected. This initiative reached its peak during the Stakhanov movement³⁰ beginning in 1935, where workers remarkably exceeding production norms, the “heroes of work”, were presented as models for the whole of society, and where other workers were expected to join the competition and raise their own production as well (cf. Siegelbaum 1988; Davies and Khlevnyuk 2002).

An even more radical form of the reduction of wages was the extensive use of forced labor during the Stalinist period. This was organized within the framework of the Gulag (*Glavnoye upravleniye ispravitelno-trudovikh lagerey i koloniy*; Chief Administration of Corrective Labor Camps and Colonies), which was established in 1930 as a group of forced labor camps spread all over the Soviet Union.³¹ The custodial population of the Gulag was according to then classified official registers above 500,000 each year from the early 1930s onwards, and often above 1 million: in 1941 it reached 1.5 million, and in the late years of Stalin’s reign exceeded 1.7 million (Getty et al. 1993). This inhumane system lost momentum only after Stalin’s death, before officially being dissolved by the Khrushchev administration in 1960. Of course, it would be doubtful to claim that the establishment of such forced labor camps followed considerations exclusively economic in nature. Mass arrests in the Stalinist period rather served political goals in the first place, and fit totalitarian concepts about an absolute control of society. Still, the Gulag population had to actively participate in large-scale economic projects (especially in mining industries and the construction of infrastructure), and its temporal changes well followed the most aggressive phases of industrial growth. In addition, special camps (the so-called *sharashkas*) were established, where, based on an excessive usage of highly-skilled prisoners, scientific research and development projects were carried out with military ends (Kerber and Hardesty 1996; also see Solzhenitsyn 2009). These facts mirror the actual role the system of labor camps played in fulfilling the goals set in the five-year plans.³²

Furthermore, the Soviet system developed sophisticated mechanisms to restrain people from spending too much on consumer goods from their usually low incomes, thus the amount of resources potentially secured for investments (and for the promotion of economic growth) increased. For instance, many imported goods

³⁰ The movement was named after Aleksei Stakhanov, a Soviet miner in the Donets Basin, who on a night in 1935 hewed 102 tons of coal, thus, 14 times his quota (Siegelbaum 1988, p. 2).

³¹ Although, as Applebaum (2003) underscores, forced labor camps had gradually been established from 1918 onwards, partly copying the Siberian prisoner camps in the Tsarist period (also cf. Jakobson 1993).

³² It is interesting to note that the Gulag population was not only expected to contribute to economic growth, but its demographic structure also seemed to be in line with this expectation. As Getty, Rittersporn & Zemtsov (1993) stresses, in 1934, 1937 and 1940 age groups between 19 and 40 constituted 74.4–85.3 % of the Gulag population, while for the whole of the USSR this value was only 35.8 % in 1937. Moreover, the proportion of males constantly exceeded 90 %, in contrast to the national value of 47.3 % in 1937 (p. 1025).

were no longer accessible after the revolution, or if so, only for influential members of the *nomenklatura*. A typical example for such a selective accessibility was the establishment of “shops for foreigners”. Certain high-quality products were sold only in these facilities, and only for foreign (“hard”) currency and gold (Heller and Nekrich 1981, p. 217). Hence, the most exclusive goods became inaccessible to the vast majority of the local population, with exception of a few belonging to the *nomenklatura*. Furthermore, since the variety of consumer goods produced in the country also decreased, consumption by individuals became limited for this reason as well. And even the goods that were produced were in many cases difficult to buy. As Kornai (1992, pp. 229–240) underscores, a very simple and in the communist countries quite typical example for this was when customers had to queue even for the most basic consumer goods such as bread, meat or shoes. Of course, this obstacle influenced the consumption of elementary products to a lesser extent. For durable consumer goods, however, the shortage and problems with accessibility in many cases led to forced substitution, where people finally bought lower quality products than desirable if these were easier to buy. Or they had to register themselves on waiting lists, which actually meant that consumption was postponed. And in some cases, shortages simply resulted in the intention of purchase being abandoned.

As can be seen, there is a great deal of evidence indicating that Harvey’s claim about the drive for technological development and institutional innovation, and its endeavor to keep wages (and consumption) low was a characteristic notion not only in capitalism but in the “really existing socialism” of early Soviet times as well. It is true, of course, that socialism in the USSR was not homogeneous over time and that its character underwent serious changes not only before and during, but even after the reign of Stalin. Furthermore, the Soviet Union was only one among the countries that experienced the communist experiment. Hence, the features we presented in the last paragraphs can be attributed to the whole of “really existing socialism” only if their relevance for later decades in Soviet history and for other countries of the Communist Bloc can similarly be verified.

For technological and institutional development aimed at a faster growth of production, this notion not only survived the Stalinist period but became a characteristic feature of Soviet policy until the collapse of the USSR. This was well exemplified by the gradual opening up of science in the Khrushchev era, which we presented in Sect. 7.1.2. These years also witnessed a thorough change in the institutional framework for central planning. Since the 1930s this had been based on a so-called ministerial system. There it was the task of the 20–30 ministries to provide the information necessary for the creation of plans to the State Planning Commission, which as a highly centralized institution was responsible for the whole of the Soviet Union. Besides, if the national plans were compiled by the planning commission and approved by the USSR Council of Ministers, their execution was again the task of the ministries. In 1957, however, a new system was introduced, which was commonly called “territorial”. Here industrial ministries were abolished, and their preparatory as well as executive tasks were given to the newly established regional economic councils (*sovmarkhozy*), each responsible for a given area. Furthermore, the

information provided by these regional councils did not directly flow to the State Planning Commission, but first to the Republican Planning Commissions, which then prepared provisional plans for the State Planning Commission. Finally, when the USSR Council of Ministries approved the plan, its execution was the task of the republican governments and the regional economic councils (a detailed description of both systems is given in Sherman 1969, pp. 134–138).

The drive to technological and institutional development as a means of accelerating economic growth was also clearly present in the Brezhnev era. Without a doubt, the planning system barely mirrored this since the territorial system was given up in 1965 and the ministry system was reintroduced, although with certain—not decisive—modifications.³³ But in the meantime, Brezhnev constantly argued for accelerating the “scientific-technological revolution” in the USSR, thus, the introduction of new technologies and institutional methods. A crucial point here was “the infusion of Western technology and methods of production and management” since he considered these as “essential to Soviet economic and technological development” (Hoffmann 1978, p. 633). For institutional innovation, considerable reforms were undertaken from 1965 onwards, with two main directions. First, the power of factory management to shape its own economic strategies increased at the expense of industrial ministries. Second, the main emphasis in planning was put on “actually marketed production” instead of “gross production”, which tried to underscore the importance of profitability (Davies 1981, pp. 30–31).

For technological development, the transfer of Western knowledge remained permanently on the agenda, and became manifest in a great many industrial cooperation agreements with leading companies in capitalist countries. Such agreements concerned a number of economic branches, from mineral resource development to manufacturing, and even the production of consumer goods, e.g. the introduction of Pepsi in the Soviet Union.³⁴ The main focus was, however, on heavy industries. Besides collaborations in the machine industry (such as the establishment of Togliatti car factory with the assistance of Italian Fiat or the

³³ Although we have to underscore that the reason for this return to the foundations of the ministry system was not only an outcome of the lobby interests of the latter. Independent from such political influences, the territorial system objectively proved unable to fulfill its expected goals. While it failed to promote a more intensive collaboration within the system as the autarchic trends of great ministries were simply substituted by the autarchic trends of regional economic councils, the efficiency of the whole of the system significantly declined since this became much more complicated and fragmented. As Alexei Kosygin, the new Chairman of the Council of Ministers (1964–1980) and the initiator of the 1965 changes (often called “the Kosygin reforms”) put it: “The divergence from the branch principle has led to poorer efficiency in the management of the branches, to violations of the uniformity of technical policy, to scattering of competent personnel, and given rise to a multi-stage system of management.” (Kosygin cited in Sherman 1969, p. 138). These in fact led to frequent irritations between various councils, which in fact consumed many resources (*ibid.*; also cf. Davies 1981, p. 30).

³⁴ Virtually the only significant “gap” was the development and manufacturing of certain high-tech products with possible military ends (such as in computer and airplane industries) (cf. Fitzpatrick 1974, pp. 58–61).

KAMAZ truck factory with cooperation of US, French and West German firms), special emphasis was put on collaboration in the branches of chemical industries. Here American as well as Western European and Japanese companies were involved, which not only provided technological transfer in certain cases, but also erected a great many plants across the Soviet Union.³⁵

In fact, reforms of the late 1960s failed to stimulate long-lasting and dynamic economic growth in the USSR since the significant corrections they introduced still left the foundations of central planning unchanged (Schroeder 1990). The high level of centralization undermined the efficiency of decision-making due to the unavoidable inability of the central planning mechanism to integrate the “knowledge which all the separate individuals possess” (Hayek 1945, p. 519). This shortcoming, which was analyzed in detail as early as the 1920s by the Austrian school economist Ludwig von Mises (1922) and, later on, by his disciple Friedrich Hayek (1937, 1945), posed an ever growing burden for Soviet society and economy. Cooperation with the capitalist world in technology and production also proved not enough to provide strong momentum to the Soviet economy. These factors together contributed much to the profound changes beginning in the USSR in the mid- and late-1980s under the Gorbachev administration, which can be interpreted perhaps as the greatest attempt in a socialist system for technological and institutional development: the widespread implementation of capitalist methods and, finally, the transition to capitalism. No doubt, the initiatives over the decades of Soviet socialism failed in sum in their attempt to sustainably boost economic growth to a level unprecedented in capitalist countries. This is why the communist experiment ended up in the collapse of the Soviet Bloc. Still, all the technological and institutional reforms we presented implied the on-going drive in “real existing socialism” à la USSR for technological and institutional innovation in order to increase production. The existence of this endeavor is not questioned by the fact that related initiatives turned out to be insufficient in practice, just as Harvey’s claim about the similar drive in capitalism is not challenged by the fact that capitalists sometimes also fail to increase the production of profit as fast as optimal (and even possible) from their view.

In addition, another form of “fix”, the notion of keeping wages low in order to secure surplus resources for investment was also characteristic of the whole history of the Soviet system, not only of its Leninist and Stalinist phases. Of course, the actual means have changed over time. The most extreme and inhumane methods of the 1930s, 1940s and early 1950s were not maintained later on. The extensive use of forced labor rapidly declined after the death of Stalin, and the Gulag system was cancelled by Khrushchev in 1960. The Stakhanov movement likewise ended after the Stalinist era and, although “labor competitions” constituted an important part of

³⁵ detailed overview of the Western companies concerned in these projects can be found in Fitzpatrick (1974). For chemical industries, which played a distinguished role in international cooperation and in technology transfer from capitalist countries, an in-depth analysis is provided by Sobeslavsky and Beazley (1980).

official propaganda, there was virtually no similar initiative later on since “the organization of an enterprise to increase the productivity of a few selected workers proved to be disruptive to the overall productivity of the plant” (Sherman 1969, p. 165). But the endeavor to increase investments (and, consequently, production) even at the expense of wages and salaries remained obviously present.

The on-going usage of this “fix” as an economic strategy serving the goal of economic growth can be illustrated if average monthly wages as well as investments are presented relative to Net Material Product (NMP), which was the basic indicator of economic growth in “real existing socialist” systems and stood for “the net production value of branches in the sphere of material production” (Staatliches Komitee der UdSSR für Statistik, 1988, p. 13).³⁶ As Fig. 8.2 indicates, average monthly pay for workers and employees increased considerably slower over the period between 1940 and 1987 than per capita NMP (i).

If various historical periods are investigated separately, it becomes clear that the gap between the dynamics of the two indicators gradually decreased, and in the 1980s the increase in payments and per capita NMP was basically equal (ii). This is, however, only 1 decade of the more than seven the Soviet experiment lasted. Furthermore, tendencies in this short final period did not balance the notorious handicap of payments compared to production, which had developed over previous decades. Meanwhile, the dynamics of total investments never fell behind the growth rate of total NMP (iv), and for the whole of the 1940–1987 period investments increased significantly faster than material production (iii).

Beyond the “fix” of keeping wages low in general in order to provide surplus resources for investment, the strategy of decreasing wages and salaries for employees in “non-productive” sectors compared to those involved in material production also remained obvious until the very collapse of the Soviet Union. After the death of Stalin the wage system underwent a major reorganization from 1956 onwards, where this strategy became manifest in two ways. On the one hand, new minimum wages were set, which were different for various activities according to their “material production”. For heavy industry and construction, which as branches gained priority in the Soviet system, minimum wages were raised to 33–35 rubles. The same values in light industry and food processing were 32–33 rubles, and only 27 rubles in “unmechanized work in state agriculture and in certain other ‘non-productive’ occupations”, among them education and health as well (Livshits 1972, p. 230; cited in McAuley 1979, p. 203). On the other hand, 3 years

³⁶ Just as all other macroeconomic indicators, NMP also had its methodological shortcomings and ideological bias. Its main peculiarity from our point of view (and relative to such commonly used indicators as GNP or GDP) was that it mirrored the strong material approach of Marxism and Leninism insofar as it did not take into consideration non-material activities, which mainly covered the sphere of services. Besides, NMP was a *net* indicator, thus, net of depreciation. For these reasons, according to Campbell’s (1985) calculations GNP for the Soviet Union was approximately 23–29 % higher during the 1970s than NMP. Although the “blindness” of NMP to non-material production is a serious weakness, this is still the most comprehensive indicator whose official values are accessible for the Soviet period.

	1940	1960	1970	1980	1985	1987
<i>(i) 1940 = 1.0</i>						
Net Material Product (NMP), per capita	1.0	3.9	6.8	10.1	11.5	12.0
Average monthly pay for workers and employees	1.0	2.2	2.9	4.0	4.5	4.7
<i>(ii) Previous date indicated = 1.0</i>						
Net Material Product (NMP), per capita	n.d.	3.9	1.7	1.5	1.1	1.0
Average monthly pay for workers and employees	n.d.	2.2	1.3	1.4	1.1	1.0
<i>(iii) 1940 = 1.0</i>						
Net Material Product (NMP), total	1.0	4.4	8.7	14.1	16.8	17.9
Investments, total	1.0	6.3	12.3	20.1	24.0	27.2
<i>(iv) Previous date indicated = 1.0</i>						
Net Material Product (NMP), total	n.d.	4.4	2.0	1.6	1.2	1.1
Investments, total	n.d.	6.3	2.0	1.6	1.2	1.1

Fig. 8.2 Temporal changes of monthly payments for workers and employees compared to those of Net Material Product and investments in the Soviet Union (1940–1987). Calculations by author based on data from the Staatliches Komitee der UdSSR für Statistik 1988, p. 22

later (in 1959) it was decided to increase minimum wages to 40–45 rubles, but this increase took place in various branches with a certain time delay. In mining, metallurgy and the chemical and cement industries it was carried out as early as 1959. In the “non-productive” sphere, e.g. in health, education and a great many other services, the same step was taken only in 1964–1965. Hence, those claimed to produce no material value began to receive higher payments only 5 or 6 years later than most workers did (pp. 203–204).

To less extent, wage policy in the succeeding decades still had some similar features. In 1968 a new wage hike was carried through, which increased minimum wages from 40–45 to 60 rubles, but without raising wages above the former minimum level correspondingly. Thus, wage categories were “compressed”, which led to a relative devaluation of the labor of highly educated technical personnel among workers compared to manual workers (p. 206). This problem was basically corrected in the next wage reform some years later, which increased not only minimum wages but benefited more educated workers to a greater extent. Here, however, the shift in wages was again a long process, just as after 1956. Hence, construction, for instance, witnessed the increase in wages as early as 1969, in most industrial activities the same happened in 1971, while in some “non-productive” branches new wages were only introduced in 1976 (p. 210).

These attempts to keep wages low in “non-productive” sectors in order to raise investments and economic production had their imprint on the overall payment structure as well (Fig. 8.3). While the growth of wages steadily remained below that of Net Material Product, relative wages for “non-productive” activities were permanently forced down relative to payments in the sphere of material production. This is indicated on the one hand by the declining difference between workers and engineers (and technicians) in industry. While the gap between these two groups was 107.3 % of the national average, this value decreased by 1986 to 11.6 %. On the other hand, the whole of the period

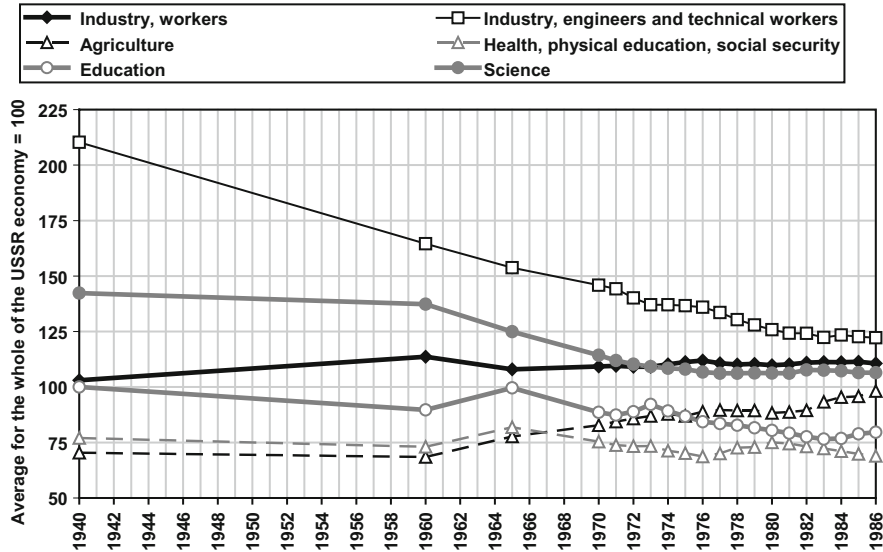


Fig. 8.3 Changes of average monthly pay in selected sectors of the USSR economy compared to the national average (1940–1986). Design by author, based on data from Pockney’s (1991, pp. 57–58.) collection of official Soviet statistics

witnessed an increase in relative payments for material labor: in 1940, industrial workers earned 103.0 % of the national average, which rose to 110.6 % by 1986. For workers in agriculture, corresponding values (1940: 70.4 %; 1986: 98.2 %) indicate a similar yet even stronger trend. In the meantime, payment in services that need an especially high level of education became more and more underpaid relative to their post-WWII levels. Employees in science earned 39.3 percentage points more in 1940 than industrial workers; after a declining trend, however, from 1974 onwards their payment on average was *lower* than that of industrial workers, and exceeded the national average by only 6.4 % in 1986. Parallel to this, employees in education came out from a basis similar to that of industrial workers (–3.0 percentage points difference), which grew to a considerable lag by 1986 (–31.0 percentage points). Those in healthcare had already been extremely poorly paid in 1940 (77.0 % of the USSR average), but their relative situation became even worse in the succeeding decades (1986: 69.0 %).

Meanwhile, keeping consumption low through strategies that hindered people from using their wages for such ends also remained typical in the post-Stalinist period. Long queues in front of shops did not disappear. Durable consumer goods could only be bought after a considerable time of waiting. For example, the average length of time on a waiting list for housing was in the 1980s some 10–15 years (Kornai 1992, p. 234). Furthermore, many products of higher quality (e.g. many exported goods) were still absolutely inaccessible for most citizens, excluding those belonging to the *nomenklatura*.

To sum it up, the strategy to keep wages (especially for “non-productive” activities) and consumption low remained a main strategy in “real existing

socialism” in the Soviet Union. And, similarly to the drive for technological and institutional innovations, it was not only characteristic of the USSR, but of all socialist countries from Eastern Europe to the Far East. This is of course no accident. After World War II, when the Soviet leadership managed to extend its sphere of influence over a number of new countries and an additional population of hundreds of millions, its Stalinist system was forced upon all satellite countries. Without a doubt, before the profound Sovietization of these countries many local communists stressed that “there is not just one single road to socialism” and that “the construction of a Soviet regime is not the only path leading to socialism”³⁷ (Spriano 1985, p. 276). Moscow, however, tolerated no deviation from its own line so that its new socialist “allies” were profoundly transformed according to the Soviet model, as subordinate units of an “ideal empire” (Bunce 1985, p. 4). Beyond the establishment of a totalitarian dictatorship, this resulted in the introduction of central planning, the setting up of planning bureaus and the launching of (usually five-year) plans.³⁸ The principles of economic management underwent serious changes. Especially in industry, mammoth companies (trusts) were brought into being, which were expected to maximize the economies of scale. The militarization of labor and a radical reorientation of education and culture for political goals were carried out actually the same way as in the previous decades in the Soviet Union.³⁹

For issues of technological development as a means of opening up new possibilities for the growth of production, the only major difference between new socialist satellite countries in the post-war period and the USSR in the 1920s and 1930s was that the former did not promote a secret but large-scale technological transfer from the West. Instead, it was the Soviet conquest of these countries itself what opened up new sources of developed technology for the Soviet Bloc, given the high standards many Eastern European firms (especially in Germany and Czechoslovakia, and in certain branches in Hungary and Poland as well) had already achieved in state-of-art industrial activities of the time (e.g. machine, electrical and chemical industries). The transfer of technology from these countries became manifest not only in the adoption of local knowledge and technologies, but in many cases even in the removal of modern devices or even whole factories to the Soviet Union. The plants previously serving the needs of high-tech military

³⁷ These quotations come from the Hungarian communist party leader Mátyás Rákosi and from his Czechoslovakian counterpart Klement Gottwald.

³⁸ The fundamental long-term goal was, of course, to put the coordination of economy on the basis of five-year plans in line with the Soviet example. In the initial period, however, some deviations were tolerated. Central planning began in Hungary with a three-year plan between 1947 and 1949 (Romsics 2010, p. 313), with a two-year plan in the German Democratic Republic in 1949 and 1950 (Weber 2012, p. 25), and with a six-year plan in Poland (1950–1955) (Sherman 1969, p. 330).

³⁹ A brief yet painstaking comparative overview of these changes for Eastern Europe can be found in Bunce (1985), especially pp. 4–8 and pp. 28–32. For a detailed description on some individual countries especially valuable sources are Weber (2012, pp. 28–41) for East Germany and Romsics (2010, pp. 271–384) for Hungary.

Country	1950–1954	1955–1959	1960–1963
Bulgaria	23.7	27.7	41.5
Czechoslovakia	23.5	27.3	27.7
East Germany	14.5	19.4	23.6
Hungary	25.9	24.2	27.2
Poland	21.1	25.1	28.1
<i>Eastern Europe, average</i>	<i>21.7</i>	<i>24.7</i>	<i>29.6</i>
Austria	20.1	23.1	24.1
Belgium	n.d.	17.1	19.1
Denmark	17.2	18.6	22.5
France	18.1	20.3	21.7
West Germany	21.1	24.3	26.4
Greece	15.9	19.2	28.9
Italy	19.7	22.4	25.6
Netherlands	21.5	24.4	24.7
<i>Western Europe, average</i>	<i>19.1</i>	<i>21.2</i>	<i>24.1</i>

Fig. 8.4 Gross fixed investment in Eastern and Western Europe (as percent of GDP, 1950–1963). Adapted from Ernst (1966), p. 890

production for the Nazi Germany (in Eastern Europe) or for imperial Japan (in China and Korea) were of especially great value in the Soviet leaders' eyes, and they were often simply removed to the USSR (for a detailed overview of these forms of technology transfer to the Soviet Union see Sutton 1973).

The manifold Soviet strategies to accelerate investment while keeping wages low were also intensively used in these new socialist countries. A characteristic imprint of this was the high level of investment indicators which, relative to total production, significantly outpaced the corresponding values in Western European countries (Fig. 8.4), although there similarly comprehensive reparations were necessary after the devastations of World War II. This high rate of investment in Eastern Europe also resulted in an increase in output indicators, but wages and salaries remained remarkably low. In Hungary, for instance, 1948 average salaries of employees reached 90 % of the pre-war level in 1938 at constant prices, but only 66 % in 1952 (Romsics 2010, p. 357). In Poland, real wages over the whole period of reconstruction increased only by 13 % relative to an extremely low basis (Sherman 1969, p. 330). In East Germany, similar tendencies were apparent (Weber 2012, pp. 37–38). Although there were certain improvements in social insurance, these in general did not counteract the decline in fiscal payments (cf. Romsics 2010, p. 358; Schmidt 2004, pp. 31–47; for urban China see Cheng and Selden 1994, p. 650). Meanwhile, the militarization of labor, the promotion of “labor competitions” and the Stakhanov movement were forced in these countries just as severely as in the USSR. The introduction of ration cards for certain basic agricultural and industrial products was also a typical policy in the whole

Communist Bloc during the Stalinist period, and in some countries right until the 1980s.⁴⁰ In addition, some other sophisticated means were used as well in order to force people to recycle a part of their payment to state investment projects. A characteristic example was that of the so-called “peace loans” in Stalinist Hungary, where individuals were expected to “voluntarily” lend a part of their income to the state, which could then use it to finance further investments. The volume of this initiative is well reflected by the fact that this strategy extracted some 6.7 % of all wages from the population in 1952 (Cseszka 2007).

The notion to raise the amount of resources focused on investments through reducing the salaries of “non-productive” employees, and to “fix” an economy whose growth opportunities were otherwise constrained this way was also carried out in new socialist countries, sometimes much faster than in the Soviet Union. For example, wage system in Hungary underwent a profound transformation in 1946. As Péter (2011) underscores, wages for workers remained on average equal in the post-war period to the 1938 level. Payment in education, however, dramatically decreased to less than one-fourth of its former standard (p. 7). In consequence, secondary-school teachers in the new system on average earned a bit less than fitters, and physicians received basically the same payment as coal miners (Romsics 2010, p. 358). In addition, the use of forced labor in satellite countries of the Soviet Union was also not unheard of, even if it did not reach the volume of the Gulag system in the USSR.⁴¹

The changes in the Soviet Union after the Stalinist period that we have presented also took place in other countries with “real existing socialist” systems. In fact, the major foundations of the system did not change significantly in most countries until the late 1980s.⁴² The relatively high ratio of investments remained (Fig. 8.5). Various “fixes”, hence, strategies of keeping consumption low did not disappear. In most countries queues in front of shops remained. Many products were not purchased or were only available to the most loyal supporters of the system. Waiting lists did not tend to become shorter.⁴³ Yet, the takeover of Khrushchev

⁴⁰ In the People’s Republic of China, for instance, the ration system concerning a great many of agricultural products was sustained for than 30 years after its introduction in 1955 (Chang and Selden, 1994, p. 657). Additionally, in Poland, Romania, the Soviet Union, and in such “specific” (not Soviet-type) socialist countries as Cuba and Vietnam, rationing of certain products was still a common practice in the 1980s (Kornai 1992, p. 242).

⁴¹ With the exception of Maoist China where an estimated population of more than ten million was involved in “corrective” forced labor (Wittfogel 1956).

⁴² An important exception within the Soviet Bloc was Hungary, where after the 1956 revolution the reestablished communist leadership tended to promote a more consumption oriented policy in order to avoid similar unrest. For this reason, payments and consumption opportunities were not as reduced as in many other socialist countries. Hence, queues in front of shops gradually disappeared in the 1960s, for example. Waiting periods, however, remained (cf. Kornai 1992, pp. 234–236).

⁴³ For housing, citizens usually had to wait 3–4 years in East Germany and 4–6 years in Hungary for state-owned rented apartments. In other countries of the Communist Bloc corresponding values were much higher (e.g. 15–30 years in Poland). The situation was basically the same for cars. Even in 1989, years had to pass before the car (a socialist country make) was delivered. In some extreme examples, citizens had to wait for 14–17 years on average, as was the case in East Germany (Kornai 1992, pp. 234–236).

Fig. 8.5 Share of investment in GDP in selected socialist and capitalist countries (1980, 1988). Adapted from Kornai (1992), p. 166, after Marer et al. (1992)

Country	1980	1988
<i>Socialist countries</i>		
Bulgaria	28	27
China	24	32
Czechoslovakia	27	26
East Germany	24	27
Hungary	29	21
Poland	25	23
Soviet Union	30	30
<i>Capitalist countries</i>		
France	23	21
West Germany	23	20
Italy	24	22
Netherlands	21	22
Spain	22	24
United States	17	17

and his early measures exerted some influence on political and economic mechanisms in Eastern Europe as well, as it is emphasized in many works (Romsics 2010, pp. 376–384; Schmidt 2004, pp. 63–64; Sherman 1969, pp. 330–333). Furthermore, the more intensive institutional changes in the USSR during the late 1950s and, later on, in the 1960s through the Kosygin reforms opened the way for similar initiatives in most Soviet satellite countries (in 1963 in East Germany, in 1965 in Bulgaria, Czechoslovakia, and Poland, and, after a preparatory phase from the early 1960s onwards, in 1968 in Hungary) (cf. Sherman 1969, pp. 329–344). Later on, attempts to adopt Western technologies through intensifying collaboration with capitalist firms were also present in Eastern Europe, and not only in the form of technological assistance programs. In fact, the green light was given to joint ventures with capitalist companies as well, in Romania in 1971, in Hungary in 1972, in Poland in 1976, in Bulgaria in 1980, and in Czechoslovakia in 1985 (Boukaouris 1988). And finally, just as in the USSR during the Gorbachev era, satellite countries in Eastern Europe also witnessed the serious changes leading to a profound change in social, political and economic circumstances. Although the date these changes began, like the intensity of reforms, showed great differences over these satellite countries,⁴⁴ the final outcome of measures to raise productivity and increase production was the transition to capitalism and to a pluralistic political system. Even in the People’s Republic of China, which diverged from the Soviet

⁴⁴ An elaborate comparison of the main paths followed by various countries can be found in Csanádi (2006), pp. 240–299.

path after the Sino-Soviet split in 1960, similar economic changes began first after the normalization of international relations between China and the United States in 1972, and especially after the beginning of economic “opening up” in the late 1970s under Deng Xiaoping’s reign.

To sum it up, while Harvey claims capitalism to be inherently controversial, one can follow a similar logic to identify similarly controversial notions in “real existing socialism”. For Harvey, the root of the problem is that capitalists are intent on increasing profit, but in order to reach this goal they do things that conflict with the ultimate objective: since they develop technology and institutional circumstances, and try to keep wages low, they reduce potential demand for their products and thus, potential profits. Analogous to this mechanism, one can see a similar situation in socialist systems. These on the one hand strive to ensure a high material standard of living for the population through production, while on the other they suck away resources from inhabitants to concentrate them on investment and increase production in this way. And as was presented, this controversy was a characteristic feature of “real existing socialism” in all countries.

It is possible, however, not to stop at this point and continue the adaptation of Harvey’s logic to “real existing socialism”. Just as he claimed capitalist countries seek alternative strategies to come to terms with inherent controversies, thus, to find and take advantage of “spatio-temporal fixes”, “real existing socialism” also had the same tendency. Actually each form of these fixes had its analogy under socialist circumstances, which we will present one by one in the next paragraphs. Here we differentiate between what Harvey called “spatial” and “temporal” fixes in his 1982 work. Although we explained that in his later essays he underscored the interwoven nature of these and introduced the term “spatio-temporal fixes”, we follow the categories he described in detail in his *magnum opus*, in order to make clear how their underlying logic can be adapted to countries of the Communist Bloc.

The first form of “spatial fix” Harvey explained in *The Limits to Capital* was the opening up of external markets in order to find new consumers and thus to increase demand for the products capitalists manufacture. This was aimed at eliminating growing problems of overaccumulation and overproduction. This logic was, however, fundamentally not different in “real existing socialism”. Since stable growth in the population’s standard of well-being was based on increasing production, leaders of socialist systems were interested in accelerating production. The problem here, however, was not overproduction, but rather an *under*production compared to the level of output regarded by these systems as desirable. Given that this underproduction mainly resulted from the shortage of resources to invest, “real existing socialist” systems became strongly interested in finding new external sources of investment, hence, new areas which could be exploited to cover the needs of investment.

This strategy had a strong imprint on international relations between the Soviet Union and its satellite countries, especially right after the end of World War II. The USSR took advantage of the new geopolitical context where it could fully subordinate its new allies to its own interests (a situation Bunce [1985, p. 3] calls “the ideal empire”). Hence, the communist superpower sucked out roughly the same amount of resources in the form of reparations and through

newly established Soviet-East European joint enterprises that Western Europe received from the United States under the Marshall Plan (Marer 1974, 1976). In the Far East, the USSR also extracted some resources mainly through reparations of plants left in Manchuria by the Japanese, but the balance of Soviet revenues from Soviet-Chinese joint companies and expenditures on aid provided to China showed no significant gains (Grow 1974). Later on, this form of “fix” gradually devaluated. In Eastern Europe, the permanent Soviet military presence consumed a great deal of resources of the USSR. In addition, Eastern European communist leaderships realized their bargaining power against the “big brother” interested in geopolitical stability on its Western borders. For these reasons, Eastern Europe gradually went in Bunce’s (1985) words from a “Soviet asset” to a “Soviet liability”. In consequence, the Soviet Union gradually lost the opportunity to squeeze out extra resources from the satellite countries in order to stimulate growth in its own economy.

The second form of “spatial fix” was in Harvey’s explanation the export of capital to regions where its turnover was either faster or higher, thus, where the amount of profit made from a given quantity of capital was higher. A similar logic was likewise present in socialist countries, in the form of concentrating investments in areas where these were expected to promote a greater increase in production. This reasoning had two typical outcomes, which mirrored two approaches, but were not contradictory. On the one hand, a great deal of investments flowed to previously “unused” areas, where dynamic growth seemed possible. On the other, it seemed reasonable to carry out more investments in districts where productivity had already been higher, at least in branches that communist leaders regarded as most important.

The most characteristic example of the first strategy was the strong drive of Soviet leadership to integrate the vast Asian part of the country into the national economic system. In their eyes these areas had previously been quite similar to dependencies of the imperial powers. This view was already present in Lenin’s works before the revolution, who in 1916 referred to 17.4 million square kilometers from a total area of 22.8 million square kilometers of the Russian Empire as “colonies” (Lenin 1964a, p. 258). The 10th Congress of the Russian Communist Party (Bolsheviks) in 1921 also emphasized that “each borderland of Russia (foremost Turkestan) was in the position of colonies or semicolonies”, who were forced to supply raw materials for the imperial core where these were processed (Wagener 1972, p. 9). In fact, according to 1908 statistics the so-called “eastern areas”,⁴⁵ which constituted more than three-fourths of Russia’s area, concentrated only 14.4 % of the nation’s population and only 3.5 % of industrial production (*ibid.*, p. 8). Moreover, vast regions were virtually unused both by agriculture and mining.

⁴⁵ These were the Urals, Western Siberia, Eastern Siberia and the Soviet Far East in the Russian SFSR, and the Azerbaijan, Georgian, Armenian, Turkmen, Uzbek, Tajik, Kazakh and Kyrgyz SSRs (see Balzak, Vasyutin & Feigin, 1949, p. 206).

For Soviet leadership the “opening up” of these areas seemed to offer an excellent “spatial fix” to find new resources for investment and thus to boost economic growth. Hence, some corresponding plans were created as early as the initial years of the Soviet Union (cf. Hajdú 1999), and certain large-scale industrial projects were indeed launched in the 1930s (such as construction works on the Ural-Kuznetsk Combine) (cf. Holubnychy 1973). These early initiatives were not without achievements. For example, the share of large-scale industry from eastern areas increased between 1913 and 1937 from 15.8 to 18.6 %. This was still however, far from a real breakthrough and, in the Russian SFSR, the total contribution of Asian regions to industrial production was still only 5 % in 1950 (Treivish 2002, p. 10; cited in Horváth 2008, p. 20).

World War II, however, brought a profound change in this situation since more than half of the industrial production in the European USSR was relocated to eastern districts in order to protect them from invading German troops. Furthermore, after the war Stalin launched comprehensive economic development programs in the Asian regions to utilize their unexploited resources and thus to accelerate production. This meant on the one hand large scale agricultural initiatives aimed at irrigation, protection against wind erosion through forestation, and even the introduction of new plants to begin production on lands previously considered as “unfertile” (Hajdú 1999; Holubnychy 1973). On the other, a great many projects were launched to establish new mines, fossil and hydropower plants, and factories where local raw materials were to be processed (Holubnychy 1973). Parallel to this, a net inflow of labor force into “pioneer regions” was maintained. These attempts clearly indicated how the Stalinist regime tried to exploit the growth potential of remote areas as a “spatial fix” in order to achieve a level of increase in national production that would have been impossible otherwise.

These initiatives did not lose momentum even after the death of Stalin. Instead, Khrushchev launched the Virgin Lands Campaign in 1953 to achieve a considerable increase in sown arable land. Moreover, he not only maintained the pace of growth in industrial investments in the Asian regions, but also urged “an *accelerated* development of industries in the eastern parts of the country” (our emphasis; Khrushchev cited in Holubnychy 1973, p. 12). This also included concepts going beyond the improvement of mining and the production of energy and intermediate products, and aimed to establish new centers of manufacturing in the former “frontier” zones. That previous projects were continued and comparable new initiatives were set for the future made clear that the Soviet “spatial fix” of promoting growth through a forced integration of the peripheries in the national economy was not a specialty of the Stalinist system, but was rather inherent in the very nature of Soviet type “real existing socialism”.

In order to carry out this “spatial fix”, “frontier” zones were obviously overpreferred in the allocation of both labor force and investments. Although the system of forced labor as a means of allocating workforce to “pioneer regions” was abolished during the Khrushchev administration, wage compensations for those working in remote parts of the Soviet Union significantly increased from the 1960s

District	Share of area (%)	Share of population (%)					
		1913	1940	1966	1970	1979	1989
European USSR and Transcaucasia	25	85.8	81.8	75.9	75.5	73.7	71.1
Siberia and the Far East	58	6.1	9.4	11.2	10.9	11.0	11.6
Kazakhstan and Central Asia	17	8.1	8.8	12.9	13.6	15.3	17.2

Fig. 8.6 The spatial distribution of population among three great districts of the Soviet Union (1913–1989). The category “Siberia and the Far East” includes the Kurgan Oblast as well in the Urals. Adapted from Probáld (1980), p. 54, with extension by author for 1989 based on official census statistics (Demoscope, n. d.)

onwards (cf. McAuley 1979, pp. 200–201). In consequence, Siberia and the Soviet Far East as well as the non-Russian peripheries of the USSR (especially in Central Asia) had a net migration gain over the post-war decades (Probáld 1980, pp. 57–58).⁴⁶ This was an important factor to increase the relative weight of these areas within the national population (Fig. 8.6). Without a doubt, net migration to these “frontier zones” gradually declined from the 1960s onwards (cf. Rowland 1990), while the contribution of higher rates of natural increase to population growth became more significant (Probáld 1980, p. 56). One should not forget, however, that the relatively large number of births compared to deaths was to a considerable extent the outcome of previous inward migration, due to which a great deal of young population had streamed to these peripheral areas. Hence, the high natural increase in these districts would certainly have not taken place without massive migration gains in the Stalinist and Khrushchevist period, or at least their volume would have been much smaller.

Furthermore, “pioneer regions” were permanently overrepresented in the allocation of investments. This was especially apparent in the case of the Asian part of the Russian SFSR, namely Siberia and the Far East. These altogether never represented more than 11,6 % of the population of the USSR, but their share of total capital investments in the Soviet Union reached 14.4 % in 1950, and fluctuated between 15 and 17 % in the succeeding decades (see Whitehouse and Kamerling 1981, p. 255). Thus, the policy of “drive toward the East” strongly infiltrated both the plans and actual economic decisions of succeeding administrations. In fact, this endeavor remained a cornerstone of Soviet regional economic policy until its very end.⁴⁷

These initiatives resulted in a gradual but remarkable increase in economic importance of the previously “unused” territories. In agriculture, total sown arable land expanded by 48.5 % between 1940 and 1970, and more than three-quarters

⁴⁶ This was despite a strong fluctuation of population, which meant that many flowing to “pioneer regions” returned to the European USSR in some years’ time due to lower costs and a relative easiness of self-sustainment there (Probáld 1980, p. 56). The number of newcomers to Asiatic regions, however, in most periods significantly outpaced that of the “returners” to the European Soviet Union.

⁴⁷ I am grateful for this information to Vladimir Shuvalov, head of Department of Economic and Social Geography of Russia at Lomonosov Moscow State University.

(77.2 %) of growth was produced by the Asian USSR. In consequence, the share of these districts from total arable land in the Soviet Union rose from 27.4 to 43.9 % (cf. Hamilton 1981, p. 204). In fact, the merely extensive nature of cultivation in non-European regions led to relatively low yields: gross revenues relative to agricultural area were in 1970 still 3.5 times higher in the European USSR than in “eastern areas” (cf. Antal 1980, p. 458). Hence, the latter’s contribution to the national total of agricultural production was less impressive. Even for grains, which were the main crops in newly cultivated lands, the contribution by the non-European Soviet Union to national output did not reach one-third (31.3 %) (cf. Hamilton 1981, p. 204). Still, it is without a doubt that the agricultural utilization of resources in these “pioneer regions” significantly increased from a low initial level.

In industry, growth was likewise obvious, especially with regard to the European and Asiatic parts of the Russian SFSR. Although the ratio of these two areas in industrial production was 95:5 in 1950, the corresponding value changed to 80:20 by 1975 (Treivish 2002, p. 10). The Asian frontiers became especially important in extractive branches and in energy production: they provided, for instance, 34.0 % of national coal production, 30.6 % of petroleum, 35.0 % of timber, and 18.2 % of electric power (Whitehouse and Kamerling 1981, p. 249). These achievements clearly indicated the seriousness of efforts made by the Soviet regime to carry out a “spatial fix” aimed at the promotion of national growth through a rapid and forced development in the peripheries.

Beyond the concept of developing the “pioneer regions”, the idea to relocate investments in districts where turnover was expected to be faster or higher opened the way for another strategy as well. The point here was to concentrate investments in areas where productivity was already higher, thus where the installation of new facilities seemed to contribute more to the overall growth of production. Special emphasis was put on urban regions, especially on great industrial agglomerations, which Soviet communists regarded as optimal locations for industrial production due to economies of scale.⁴⁸ In the USSR the accelerated development of towns and cities gained priority from the very beginning. Although during the first all-union census in 1926 only 17.9 % of the population lived in towns and cities, the same value was 32.5 % in 1940 (Fig. 8.7). This shift equaled to an annual growth rate of 6.5 % for urban population, an extreme value in historical comparison: in England between 1776 and 1871, where the urbanization rate increased from 25.9 to 65.2 % over a bit less than 100 years, there was no 5-year period with urban population growth rates exceeding 2.64 % (cf. Williamson 1988, p. 289).

Later on, the dynamics of urbanization gradually slowed down in the Soviet Union, but it still remained unconventionally high in the succeeding decades. Between 1940 and 1959, despite massive USSR casualties in World War II

⁴⁸ A typical way of seeing here was what the Soviet urbanologist Viktor Perevedentsev expressed in a 1969 article: “the productivity of labor in cities with a population of over 1,000,000 is 38 % higher than in cities with a population of from 100,000 to 200,000 and the return on assets is almost twice as high” (cited in Frolic 1976, p. 161).

	1926	1940	1959	1970	1979	1989
Urban population (million persons)	26.3	63.1	100.0	136.0	163.6	188.8
Urbanization rate (% of total population)	17.9	32.5	47.9	56.3	62.3	65.9
Average annual growth of urban population since the last date (million persons)	n. d.	2.6	1.9	3.3	3.1	2.5
Average annual growth of urban population since the last date (%)	n. d.	6.5	2.5	2.8	2.1	1.4

Fig. 8.7 Dynamics of urbanization in the Soviet Union (1926–1989). Design by author based on data from Demoscope (n. d.) (for 1926), Staatliches Komitee der UdSSR für Statistik (1988, p. 168) (for 1940–1979), and Kingkade (1993, pp. 798–799) (for 1989)

accounting for losses of 24–27 million,⁴⁹ annual growth in the number of inhabitants in towns and cities reached 2.5 %. Then in the 1960s Soviet urbanization quickened its pace again to a value unprecedented in England during the Industrial Revolution. In consequence, the USSR, with more than four-fifth of its citizens living in rural areas before the First Five-Year Plan, witnessed in three and a half decades the number of urban inhabitants outpacing those living in the countryside. This was the outcome of policies aimed at “fixing” the economy through the relocation of active population, considered as a decisive factor of production, to regions where additional labor force was expected to induce the highest level of surplus growth.

For sources of this boom, in the periods between 1927–1938 and 1939–1958 the contribution of natural growth in towns and cities to the total increase in urban population was only 18 % and 20 % respectively. More than three-fifths of the increase (63 % and 62 %, respectively) originated from migration from rural areas, and more than one-sixth (19 and 18 %) from the emergence of new cities (either by granting urban status to villages or by founding new towns) (Pokshishevsky, 1972, p. 26). Although the boost in urban population necessarily resulted in an increasing role of natural growth in further urbanization, its contribution to the process was still well below 50 % (41 % and 44 %, respectively) for 1959–1970 and 1970–1979. This was due to the persistent influx of rural inhabitants to urban centers (Kozhurin and Pogodin 1981, p. 58) as part of the Soviet “spatial fix” to accelerate growth through what was expected to be a more efficient geographical distribution of factors of production, even if this rather increased than decreased “uneven development” and spatial inequalities.

In fact, the policy of rapid urbanization not only aimed to produce quantitative changes, namely a stable growth of population in towns and cities. It had qualitative aspects as well since investments were also focused in urban areas. And this did not only go for the construction of gigantic factories, which due to their dimensions needed thousands or even tens of thousands of laborers, thus, could only be settled in great cities for organizational reasons. In fact, much more remarkable was the

⁴⁹ In Russia the officially referred value is 26.6 million after Krivosheev (1997). For some other estimations see Barber and Harrison (2006) and Davies (2007).

Equipment	Cities and towns	Rural settlements
Tap water connection	83	30
Sewage disposal	80	19
Central heating	84	20
Bath tub	75	16
Hot water connection	69	9

Fig. 8.8 The percentage proportion of urban and rural households in the Russian Federation with selected equipment (1993). (It was not common for reliable statistics on similar issues to be released in Soviet publications since they would have clearly indicated the serious shortcomings of public infrastructure and challenge the official propaganda of social and spatial equity. Given the strong path-dependence in the temporal development of infrastructure, however, corresponding data from 2 years after the collapse of the USSR can be used as relevant indicators of conditions during the late 1980s.) Design by author based on Brade and Schulze (1997), p. 47

asymmetrical allocation of resources in urban districts at the expense of the countryside in services where an extreme concentration in space is not a technical necessity. For example, although the urban infrastructure in the Soviet Union was poorly developed in comparison with capitalist countries of similar output standards (cf. Frolic 1976), it was still much more improved than in villages; the urban–rural gap was striking (Fig. 8.8).

Furthermore, the communist leadership made definite attempts not only to prefer urban areas, but to put emphasis foremost on the development of large cities in accordance with the principles of efficiency and economies of scale. On the one hand the point was obviously to steer as much of the workforce as possible from smaller towns to large cities. In consequence, as a share of the whole urban population cities above 500,000 inhabitants permanently increased (Fig. 8.9).^{50, 51} On the other, investments were likewise focused in large urban centers, especially in those whose initial efficiency in economic production was also higher, thus, where a higher increase of production could be expected from a given amount of investment. This became most apparent in spheres whose existence and improvement was a crucial prerequisite for the development of most productive economic branches.

⁵⁰ In fact, similar processes of concentration took place within the network of rural settlements (cf. Brade and Schulze 1997, p. 44 for the Russian SFSR).

⁵¹ The “systemic” nature of urban centralization is well exemplified by the actual outcome of attempts of the Soviet planning mechanism from the 1960s onwards to limit the population growth of cities above 500,000 inhabitants. Since the problems of overconcentration tended to become more and more apparent, town planners in the USSR, in concert with certain party directives, tried to “deliberately limit” the population of cities above half a million souls and decentralize their disproportionately large production basis. These initiatives, however, were unsuccessful as is clearly presented by statistics in Fig. 8.8. As Frolic (1976) underscores, this was an outcome of the system’s drive to growth, due to which the newly emerging objective of creating cities better to live in was rapidly outplayed by the system’s deeply rooted traditional fixation with economic growth.

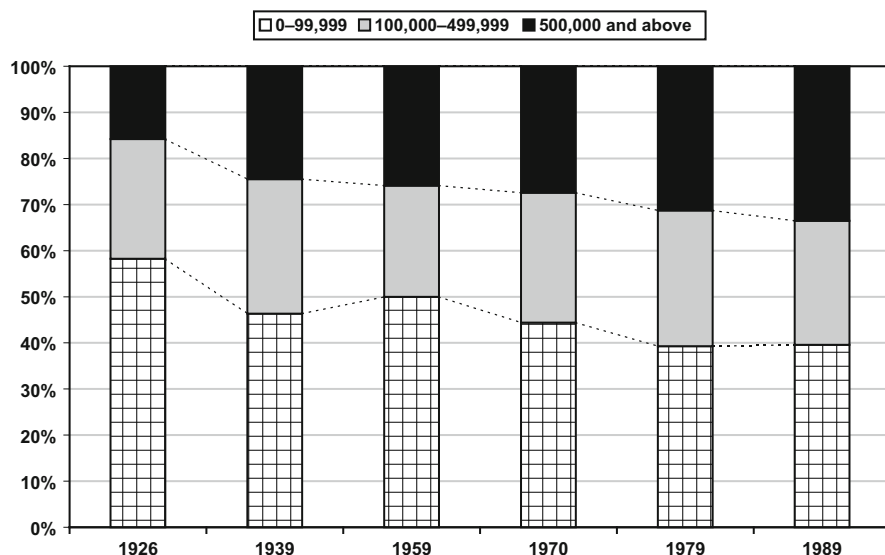


Fig. 8.9 The structure of urban population in the Soviet Union according to city size (1926–1989). Design by author based on data from Lewis and Rowland (1969), p. 780 (for 1926, 1939 and 1959), Pokshishevsky (1972), p. 25 (for 1970), and Demoscope (n. d.) (for 1979 and 1989)

Higher education, for instance, which is a crucial sector both politically (as the trainer of an intelligentsia loyal to the power) and economically (as provider of a highly-skilled labor force demanded in leading branches of production),⁵² was disproportionately concentrated in the two largest cities, Moscow and Leningrad as indicated by statistics for the Russian SFSR (Fig. 8.10). And this was not simply an historical heritage of the Tsarist period since Moscow's importance in higher education increased between the academic years of 1940/1941–1960/1961 as well (even relative to its share of total population) Without a doubt, this tendency reversed later, and from the 1960s onwards the relative weight of both centers in higher education gradually decreased. In 1990/1991, however, Moscow's share of students was six times higher than of total population of the Russian SFSR; in Leningrad the corresponding ratio was 5.5. These values still mirrored a strong spatial concentration of higher education, which clearly indicated how the notion to accelerate growth and focus investments in cities with the highest efficiency infiltrated the location policy of the Soviet system, even contrary to the propagandistic claim of promoting equity. It also mirrored how the children of the nomenklatura were privileged in the access to higher education.

⁵² For the spatial location of higher education as a strategic branch of knowledge production close to the center of political power see Meusbarger (1998b).

		1940/41	1960/61	1970/71	1980/81	1990/91
Share of students (%)	Moscow	29.8	31.9	23.1	20.7	18.7
	Leningrad	17.8	12.4	10.2	9.2	8.8

		1939	1959	1970	1979	1989
Share of population (%)	Moscow	2.7	2.9	2.9	3.0	3.1
	Leningrad	1.9	1.4	1.5	1.6	1.6

Fig. 8.10 The share of Moscow and Leningrad from university students and total population of the Russian SFSR. Statistics on students refer to academic years, population numbers are official census data. Design by author based on data from TsSU RSFSR (1981), pp. 380–341 (number of students in 1940/1941–1980/1981), Goskomstat RSFSR (1991), pp. 244–246 (number of students in 1990/1991), Staatliches Komitee der UdSSR für Statistik (1988), pp. 174–175 (population in 1939–1979), and Demoscope (n. d.) (population in 1989)

The geographically asymmetrical development of high value-added activities in accordance with the goal of promoting growth was also reflected by statistics on the spatial allocation of labor force with higher education. Despite the slogan of the abolition of “the exploitation of the country by the town” (Stalin 1972[1952], p. 25) and “the antithesis between town and country” (p. 26), Soviet labor policy created and sustained remarkable asymmetries not only between town and country, but also between great cities and mid-size and small towns. As Fig. 8.11 shows, activities where staff with tertiary education is needed were remarkably overrepresented in Moscow and Leningrad. While on average one of ten workers and employees (10.2 %) had absolved higher education in the Russian SFSR, corresponding values were 18.6 % in Leningrad and 21.4 % in Moscow. In consequence, these two cities, which together made up only 4.6 % of total population and 7.2 % of urban population in the Russian SFSR, concentrated almost one-fourth (24.0 %) of high-skilled labor force.

The remarkable difference between a few ultimate centers and other towns and cities (even with more than one million inhabitants) with regard to investments was likewise apparent in developments aimed at promoting the inhabitants’ standard of material well-being. For instance, in 1974 per capita urban living space in the Soviet Union was 7.8 sq. m (Bater 1977, p. 194). For cities with at least one million inhabitants, the median value was exactly the same. In the three largest urban cores of the USSR, however, the situation was much better: corresponding values were 9.0 sq. m in Kiev (1.9 million inhabitants), 8.7 sq. m in Leningrad (4.3 million), and 10.0 sq. m in Moscow (7.6 million) (*ibid.*, p. 195). And these differences could not be blamed on “historical heritage”, but were direct consequences of the Soviet policy of focusing investments in large urban districts. As can be calculated from the data released by Smith (1979, p. 232), the median of per capita living space values for cities in the USSR above one million had been 5.1 sq. m in 1958, and values for the three main centers had not been outstanding. Then, 5.6 sq. m of living space went for one inhabitant in Kiev, 5.9 sq. m in Leningrad, and 5.0 sq. m in Moscow. Hence, considerable differences among “top” cities and others were

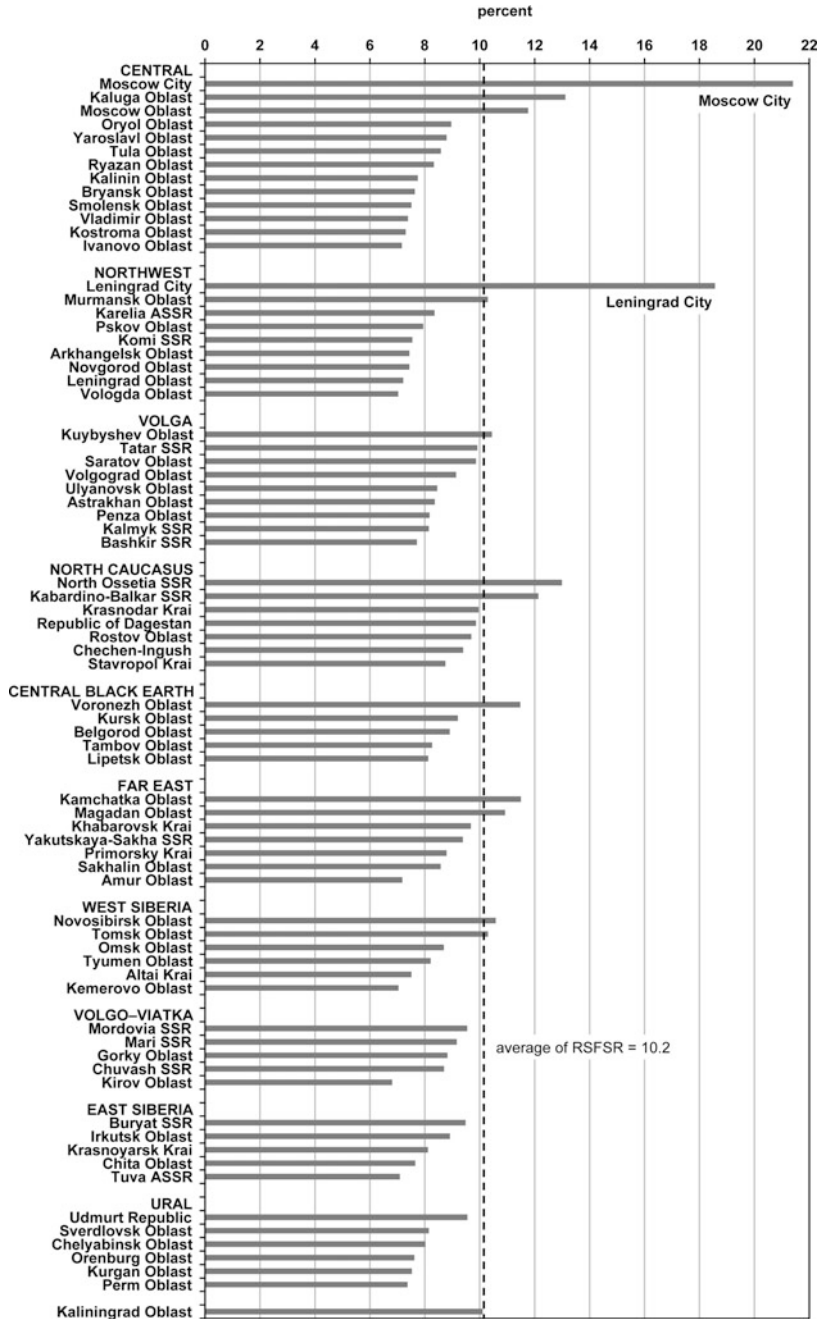


Fig. 8.11 The share of labor force with higher education among workers and employees in all branches in the Soviet Union (1980). Administrative divisions grouped by economic districts (names in capital) in descending order according to district-level averages. Design by author based on data from TsSU RSFSR (1981), pp. 224–225 (labor force with higher education) and Goskomstat RSFSR (1991), pp. 111–113 (total labor force)

straightforward consequences of Soviet policy, or in other words, outcomes of a socialist “spatial fix”.

Similar asymmetries, in fact, also became manifest in the uneven development of supply systems covering the basic needs of the population. As Smith (1979) underscored, “the best educational institutions tend[ed] to be in the major cities” (p. 233). Actually the same was true of kindergartens. In Madison’s (1975, p. 256) words: “In large cities, most three-to-seven-year-olds are accommodated at first request, but in smaller cities, the situation is far from satisfactory” (cited in Smith 1979, p. 233). Food supply was likewise unequal as was explained by Kaiser (1977):

“Consumer goods go first to Moscow, then to half a dozen other ‘hero’ cities, so designated for their roles in the Second World War, then down a hierarchical list on which every community is ranked. The State stores in Moscow are always supplied with fresh meat. Novosibirsk, a city of a million souls, sells no meat at all for months on end. Some meat is usually available at Novosibirsk’s farmers’ market, but only at high prices. There are smaller cities and towns that *never* get fresh meat in any form.” (emphasis in original; Kaiser 1977, p. 95; cited in Smith 1979, p. 234)

In summary, the notion to concentrate investments in urban areas, especially large ones, where a higher and faster turnover was expected, constituted as a “spatial fix” a fundamental part of Soviet economic and social policy. This phenomenon at the level of localities, in fact, had a strong impact on regional processes as well. Federal socialist republics of the USSR with a higher rate of urbanization and with relatively developed economic bases (including improved traditions in high value-added branches) gained on average more investments per head from the very beginning.

As presented in Fig. 8.12, relative to its population the Russian SFSR, in fact the leading economic and political engine of the Soviet Union, was apparently over-represented in investments during each administration. Estonia and Latvia, the most productive centers of a great many of high-tech industries based on rich tradition, know-how and highly improved human capital,⁵³ likewise constantly belonged to the main beneficiaries of Soviet investment policy. On the southern peripheries, however, although numerous large projects were carried out in concert with the endeavor to integrate these areas into the national economy, per head investments in most republics considerably fell behind those in Russia or the Baltic republics. With the exception of Kazakhstan and Turkmenistan, most southern republics received far fewer resources than their economically more developed central and western rivals. Furthermore, the values of Turkmenistan were in the long run also significantly lower than for Estonia and Latvia.

Of course, it is important to emphasize Bahry’s (1983) findings, which indicate that at least until 1970 inequalities in the volume of per head capital investments

⁵³ A statistic that says volumes: in 1965 the number of “specialists” (labor force with tertiary or special medium-level education) per 10,000 persons was 67 in Estonia and 62 in Latvia, but 57 in Russia and only 52 for whole of the USSR (Woroniak 1973, p. 279).

Republic (SFSR)	Rank according to per capita investments				
	1928–1932	1946–1950	1956–1960	1970	1982
Russia	1	3	2	4	1
Estonia	n.d.*	1	3	1	4
Latvia	n.d.*	6	6	3	2
Lithuania	n.d.*	12	5	6	5
Belarus	9	10	13	8	7
Ukraine	3	5	4	9	11
Moldova	12	15	15	10	9
Georgia	5	4	12	13	8
Azerbaijan	2	2	6	14	12
Armenia	8	9	10	7	11
Kazakhstan	6	8	1	2	3
Turkmenistan	8	7	8	5	6
Uzbekistan	10	14	14	11	13
Tajikistan	5	12	10	15	15
Kyrgyzstan	11	12	10	12	14

Fig. 8.12 The republics of the USSR ranked according to per capita investments (1928–1982). Adapted with modifications from Westlund (2000), p. 27. *Estonia, Latvia and Lithuania did not belong to the USSR until 1940, when they were occupied by Soviet troops in accordance with the 1939 Molotov-Ribbentrop Pact between the Soviet Union and the Nazi Germany

(measured by coefficient of variation) gradually declined (from 0.402 to 0.227), even if far from diminished. What one can say, however, was that the principle of “more investments to more productive areas” became less explicit. This did not challenge the fact that it was still the more productive republics that gained more resources. In other words, the gap between economically more and less efficient republics did not close, only the pace of opening the gap reduced somewhat. This was again an outcome of the socialist “spatial fix” to allocate investments to regions where a higher turnover was expected. No wonder that republics with a more beneficial initial position (e.g. Estonia, Latvia, Russia) remained at the top of list of relative production, while most peripheral republics could not step out from their disadvantageous situation (Fig. 8.13). And this disadvantage did not only refer to output indicators; for personal income, housing or public services (e.g. healthcare), differences among the republics were rather similar (Fig. 8.14).

To sum it up, the Soviet system, permanently pressed by the drive to growth, extensively used as a “spatial fix” the asymmetrical allocation of resources into areas where they seemed to stimulate a higher increase in production. This resulted both in the “opening up” of “pioneer regions”, which were foremost subjected to the rapid development of raw material extracting branches, and where growth became manifest mainly in the radical increase of *volume* indicators (e.g. *total* production). Meanwhile, in high value-added sectors as well as in services, the disproportional concentration of resources into urban areas was adopted as the norm, the major outcome of which was a massive rise in *relative* indicators (*per capita* income, *per capita* housing etc.). At the same time, the gap between towns and villages, large and small cities, and even between highly and poorly urbanized (industrialized vs. agricultural) regions and republics persisted, both in volume and relative

Republic	Rank according to produced national income per capita		
	1956	1967	1988
Russia	4	3	1
Estonia	1	1	3
Latvia	2	2	2
Lithuania	8	4	5
Belarus	15	6	4
Ukraine	6	5	6
Moldova	9	8	8
Georgia	12	11	7
Azerbaijan	7	12	11
Armenia	10	15	9
Kazakhstan	5	9	10
Turkmenistan	3	7	12
Uzbekistan	13	13	14
Tajikistan	14	14	15
Kyrgyzstan	11	10	13

Fig. 8.13 The rank of Soviet republics according to per capita production (1956, 1967, and 1988). Design by author based on data from Westlund (2000), p. 27 (for 1956, 1967) and Bond et al. (1990), p. 713 (for 1988)

indicators. Hence, at this point the logic of the Soviet system was again strikingly similar to that of capitalism, where in Harvey's interpretation capitalists were interested in moving capital to where it could efficiently contribute to the maximization of profits. In fact, Soviet leaders tended to do the same in order to keep economic growth as high as possible.

The use of these strategies to "fix" the economy was of course not a Soviet peculiarity. No doubt, the initiative to "open up pioneer regions" was rather possible only in countries with vast geographical expanses and with a great many poorly populated remote districts. For this reason, similar projects as the "drive toward the East" in Soviet Union took place only in China. Their main objective was similar as in the USSR, namely to integrate new resource-rich regions into the Chinese economy. Related attempts were made in several waves during the Maoist period. Right in the first years after the proclamation of the people's republic, during the First Five-Year Plan in 1953–1957, some seven million workers were relocated to great construction projects in inland provinces (Scharping 2006). This process exerted the greatest influence on the northwestern border region with the USSR, where the goal was the establishment of a "Eurasian" industrial axis, lying from South Siberia through Soviet Central Asia to inner China (Dürr 1978, pp. 149–150). Within this framework, the "frontier zones" were expected to supply

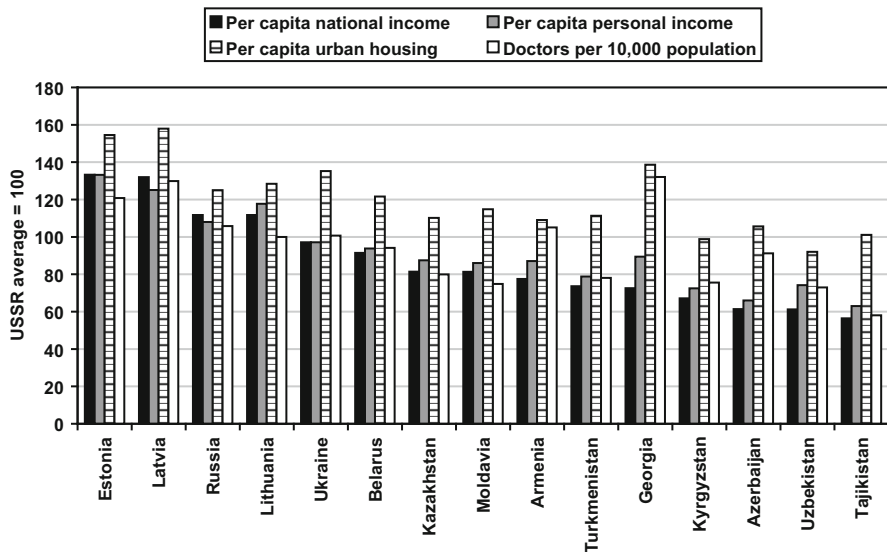


Fig. 8.14 Per capita national income, personal income, and urban housing indicators, and the number of doctors per 10,000 population in Soviet republics compared to the USSR average (1970). Republics ranked according to per capital national income. Design by author based on data from Woroniak (1973), p. 269 (national income), McAuley (1979), p. 109 (personal income), Schroeder (1973), p. 184 (urban housing) and p. 185 (doctors per 10,000 population)

the mineral resources (ores and fuels) necessary for a rapid “take-off” in the Chinese economy. These regions were also subjected to programs similar to the Virgin Lands Campaign in the Soviet Union, which resulted in the (in many cases) forced migration of approximately two million persons to the northwestern province of Xinjiang.⁵⁴

Additionally, in order to promote economic growth several projects were launched with the aim of sending workers from urban areas to the rural countryside, which the Chinese leadership believed suffered from chronic shortage in labor force. This initiative impacted more than two million urban inhabitants through the end of the First Five-Year Plan. Moreover, in the 1960s some 30 million persons (among them many rural migrants) were steered to the countryside, and a further 18 million young urban dwellers were likewise repatriated to rural districts, mostly in border regions on the north, west and south. Altogether, approximately 60 million laborers participated (or had to participate) in these inner migration movements, which aimed at the intensive utilization of rural resources and, as was expected, at a historically unprecedented growth in production (Scharping 2006).

In the small countries of Eastern Europe, “empty spaces” were hardly to be found any more in the post-war period, so increasing output by integrating “pioneer

⁵⁴ A detailed overview of this initiative is given by Betke (1998).

regions” was not an option. The other strategy to maximize production, namely the concentration of investments in urban areas, was however a characteristic feature of economic policy both in Eastern European socialist countries and in China. In Hungary, for instance, the new communist leadership launched a firmly pro-urban and anti-countryside policy right after the total takeover of political power in 1948. The capital city Budapest, which was also the ultimate center of Hungarian industry and which already concentrated 11.5 % of the country’s population in 1949, was enlarged in 1950 through the merger with 23 towns and villages in the agglomeration. As a result of the Stalinist leaders’ objective to create “Great Budapest”, the city’s share of national population rose to 17.3 % (calculations by author based on data from KSH 1950, p. 315).

Meanwhile, a great deal of industrial investments were also carried out in the city, due to which the number of workers and employees in industry doubled by 1960 (from 291,000 to 603,000) (Beluszky 1999, p. 226). In addition, construction began on new “socialist towns”, expected to become the major centers of socialist industry. These nine towns were actually small settlements at the turn of the 1940s and 1950s, yet, their share of total national investments was unrealistically high: between 1948 and 1953, they received approximately half of all investments (!), while their share of communal and social investments in Hungary changed between 40 and 70 % in these years (Germuska 2002). The pace of growth in these “socialist towns” was, of course, unprecedented relative to other urban centers. Still, many towns with a regional sphere of influence gained new industrial plants in the same period (Bartke 2003, p. 123).

Rural settlements were, however, exposed to harsh attacks. The communist state planning regime judged all localities below 3,000 inhabitants “uneconomical” to maintain (Beluszky 1999, pp. 223–224). The smallest ones, almost half (47.4 %) of all settlements, were considered in a 1950 national plan document as “settlements not to be developed” (Germuska 2002), which actually meant that they were planned to lose their social infrastructure (schools, public administration) and to be gradually demolished in the long term. Here, a 1949 government decree banned the construction of flats as well as public buildings (Hajdú 1990–1991). Some 900,000 persons, then almost 10 % of the country’s population, were planned to be relocated to bigger villages and towns (*ibid.*).

In fact, the death of Stalin in 1953 and the resulting political competitions within the communist party in Hungary counteracted the realization of these goals. Furthermore, after the brutal suppression of the 1956 revolution by Soviet troops a new, non-Stalinist leadership emerged, which did not adopt all of the objectives of its Stalinist forerunners. Hence, a large-scale physical destruction of settlements was not carried out. Still, a massive influx of the rural population to urban districts began. In Budapest, the number of inhabitants calculated for the area after the 1950 mergers (thus, excluding the effect of this administrative change) increased by 13.5 % between 1949 and 1960 (calculations by author based on data from KSH 1950, p. 315). Several “socialist towns” multiplied their population. In Stalintown (recently Dunaújváros), for instance, which was the number one project aimed at the construction of a new iron and steel plant, the number of inhabitants increased

from 4,000 to 31,000 between 1949 and 1960 (Beluszky 1999, p. 420). In consequence, by 1960 the total urban population rose by 600,000 in a country with less than ten million inhabitants (*ibid.*, p. 231), and the concentration of both industrial production and infrastructure in urban areas strengthened.

From the 1960s onwards, not independently from Khrushchevian and Brezhnevian reforms in the Soviet Union, but in many cases going well beyond them, economic policy and its geographical objectives underwent important changes in Hungary.⁵⁵ At the turn of the 1950s and 1960s, it became an official goal to reduce the overconcentration of production and population in Budapest. New industrial plants were not allowed to be built in the capital city and its agglomeration, and many among the companies already located there had to relocate some parts of its production to the countryside. Parallel to this, investments in mid-size towns were put in the forefront (Bartke 2003, pp. 124–125). Meanwhile, the harsh ideas of short-term physical destruction of a great many small settlements and forced relocation of hundreds of thousands of citizens were given up. This shift has some consequences that seemed to reflect a certain trend of spatial equalization in production as well as in the population's material standard of living. For instance, in 1960 still 44.6 % of Hungarian labor force in industry worked in Budapest. This value declined to 34.3 % in 1970 and to 25.7 % in 1980 (*ibid.*, p. 124, p. 129). In several regional centers important developments took place in industry, due to which output indicators significantly increased, especially in districts previously having a poor industrial basis. The disproportional support of the few "socialist towns" decreased, mostly in favor of regional centers. In consequence, differences in the level of production, income and the standard of social services apparently decreased between towns and cities in various regions (Nemes Nagy 2003, pp. 566–569).

These tendencies, however, did not fundamentally eliminate spatial disparities, nor did they challenge the strategy of "real existing socialism" to concentrate investments in areas where a higher multiplier effect was expected. The strong preference of towns and cities at the expense of rural areas remained a common practice in central decision-making. Without a doubt, voluntaristic attempts to relocate hundreds of thousands from the countryside to towns died away after the Stalinist period. Most underlying philosophical considerations, however, persisted. A 1963 official concept study, for instance, still emphasized the need for the "liquidation of inherited disproportionalities of the settlement network" (in fact, the existence of a great many rural settlements), and projected that "villages unable

⁵⁵ In fact the main directions of Hungarian economic reforms were similar to those in the USSR and in other Eastern European countries (which were already presented in previous paragraphs), but their implications were more far-reaching. For example, the 1968 reform package in Hungary entitled New Economic Mechanism was judged by Granick (1973) as "the most radical postwar change, in the economic system of any Comecon country" (p. 414). These peculiarities made up the basis for a more market-oriented form of socialism, usually referred to as "goulash communism". The main foundations of the system remained unchallenged, however, as explained e.g. by Kornai (1992).

to develop” and “peripheral settlements” were to “cease gradually” (Építésügyi Minisztérium, 1963; cited in Hajdú 1993, p. 46). These strongly-worded formulations gradually disappeared by the 1970s and 1980s, but their logic did not. It speaks volumes that in the 1980s, when still some 40 % of the population lived in villages, the share of these areas of national industrial production was only 16–17 % due to the low number of industrial facilities established here (Beluszky 1999, p. 244). Furthermore, industrialization in the villages usually meant the improvement of raw material extraction, not that of high value-added activities (*ibid.*).

For social infrastructure and living conditions, circumstances were not better. In the first part of the 1970s, 90 % of investments in communal services took place in towns and cities, which added approximately half of the country’s population (Illés 1993; cited in Beluszky 1999, p. 235). From national development aid villages received only 7–15 % over the decades of “real existing socialism” (Illés 2003, p. 516). Moreover, the 1960s and 1970s witnessed a strong, centrally led concentration of infrastructure in small settlements. In the first round, many local councils were closed down in villages this size, thus the political bargaining power of local party cells significantly decreased. Instead, in the new system one council located in a larger village was responsible for several other settlements as well, so the latter became subordinated to the former. This opened the way for “the reduction of functions in villages” (Nemes Nagy 1987a, p. 69), thus, a gradual degradation of local infrastructure under the aegis of “rationalization”.

Although small villages already had very limited political power and little room for manoeuvre, the policy of “rationalization” in the 1970s left them almost completely powerless. As Fig. 8.15 shows, in 1960 the vast majority of settlements (94.3 %) had their own council, but in 1980 less than half of them (48.9 %) did, since the number of councils dropped by 50 %. This severely weakened the bargaining force of small settlements. In consequence, although the number of settlements underwent only slight changes between 1960 and 1980, they lost many of their institutions. For instance, in 1960 ten settlements had 13 farmers’ cooperatives on average, which were the backbone of collectivized Hungarian agriculture. Two decades later, the corresponding ratio was 10:4. For state farms, the decrease was similarly radical. This in fact barely meant that the total area of these production units would have decreased. Their management was, however, strongly centralized, and within firms higher value-added activities tended to migrate toward geographical locations closer to the seats of cooperatives, while in peripheral locations (settlements) rather low value-added branches were maintained. Social infrastructure also had serious losses. Rural marketing collectives, which among others were responsible for running local shops, were to be found in two-fifths (41.9 %) of all settlements in 1960, but less than in one-eleventh (8.7 %) in 1980. Parallel to this, the world where virtually each settlement (98.5 % in 1960), even if very small, had at least one elementary school, ended: in 1980 in almost one-third (29.7 %) of all settlements children had to commute to neighboring villages and towns even to use the fundamental service of basic education.

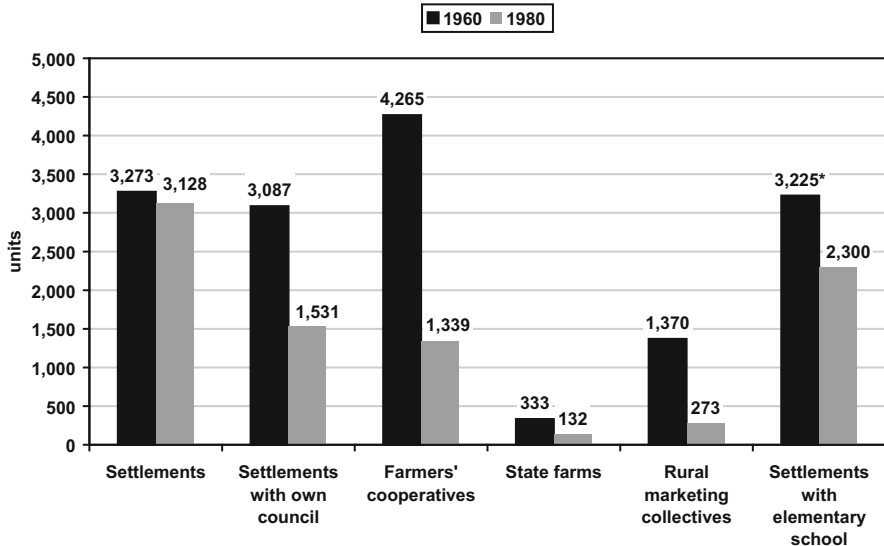


Fig. 8.15 Infrastructural changes in Hungarian settlement network due to “rationalizations” between 1960 and 1980. Design by author based on data from Nemes Nagy (1987a), p. 71, with additional remarks of Nemes Nagy. *data for 1963

Even in those issues where the urban–rural gap seemed not to be that large, actual disparities as outcomes of the “spatial fix” of “real existing socialism” were striking in the background. Although differences between town and country in investments in communal infrastructure virtually decreased from the 1970s onwards, power asymmetries in fact persisted (*ibid.*, pp. 27–33). In Budapest, such investments were dominantly financed by the communal sphere; the contribution of local population (based on their own savings) to these projects reached only 15.5 % between 1976 and 1980. In other towns and cities this value was 34.9 %, and in villages 70.0 %. During the 1980s, these values increased all over the country due to intensifying economic problems, but this barely influenced the disparities between the capital city, other towns and cities, and villages. In the period 1981–1984, corresponding values were 30.0, 51.3 and 77.0 % (Nemes Nagy 1987a, p. 28). In other words, in cases where investments in villages seemed not to fall drastically behind those in urban areas, rural inhabitants were in fact expected to take the leading role in covering costs, while the urban population did not have the same burden. Thus, the logic of the system to concentrate investments (more precisely, its *own* investments) in areas with a higher potential of multiplying economic growth was not challenged.

Beyond preferring urban areas to rural ones, the drive for maximizing the growth induced by a given unit of investment also became manifest in an extreme concentration of high value-added economic activities in Budapest, the dominant urban center in Hungary. On the one hand, the great number of plants, which were established in less industrialized districts after restrictions on industrial

development in the capital city, usually concentrated only some low value-added activities, in which labor force with low education was utilized. More productive activities, however, and the company management mainly remained in Budapest; decision-making in economic firms was not decentralized at all (Beluszky 1999, pp. 241–242). In other words, although the industrial statistics (especially those concerning the sectorial distribution of labor force) of the periphery seemed to improve, this process barely concerned capital intensive branches in industry.

On the other hand, even if at least the low value-added part of industry underwent certain decentralization in terms of geography, this shift left untouched those sectors which were in fact the main engines of national economic growth. In 1980 Budapest, with its share of 23.9 % of all workplaces in Hungary, concentrated 48.5 % of jobs requiring employees with a university education and more than 80 % in key branches of the socialist system (Meusburger 1997, pp. 132–133), for example 84.6 % of employees of leading organs of state power and central administration⁵⁶ (Meusburger 1995, p. 78), and 80 % of top economic managers (Beluszky 1999, p. 369). Meanwhile, villages and towns with less than 5,000 inhabitants, although concentrating 21.4 % of all workplaces in Hungary, provided jobs for only 7.4 % of those having a university degree. Furthermore, this proportion was only 2.0 % in public administration, 1.4 % in law and public order, 0.8 % in banking and finance, and 0.4 % for leading organs of state power and central administration (Meusburger 1997, p. 133; 1998a, pp. 374–375). This extreme concentration of high-quality human capital in one city and the negligence of small villages was in fact much stronger in socialist Hungary than in the neighboring capitalist Austria, where the demographic structure of the population as well as historically inherited asymmetries in the settlement structure (e.g. the primacy of the capital city) were otherwise similar (also cf. Meusburger 1995). On the one hand, the number of jobs held by university graduates was 127 per 10,000 inhabitants in Budapest in 1980, but only 50 in Vienna in 1981. On the other, the same value was only 0.39 for villages with not more than 500 workplaces in Hungary, but 0.68 in Austria. Although not as extreme, the concentration of such jobs in the capital city and some other large regional centers, and their lack in the rural periphery, was mirrored by statistics for small and medium size towns as well (Fig. 8.16).

These imbalances generated permanently increasing economic growth in Budapest and persistent structural problems in the periphery. For example, after some initiatives in Hungary aimed at the introduction of small-scale private enterprises in the early 1980s, Budapest soon concentrated some two-thirds of such companies in the country. In the meantime, its total foreign trade was already larger with the capitalist world than with the Comecon (Beluszky 1999, p. 369). This unique situation would have been impossible without the previous decades when the communist leadership focused disproportional investments in capital and

⁵⁶ This constituted a separate category in then official (although not widely disseminated) labor statistics of the Hungarian Central Statistical Office (cf. Meusburger, 1998a, p. 374).

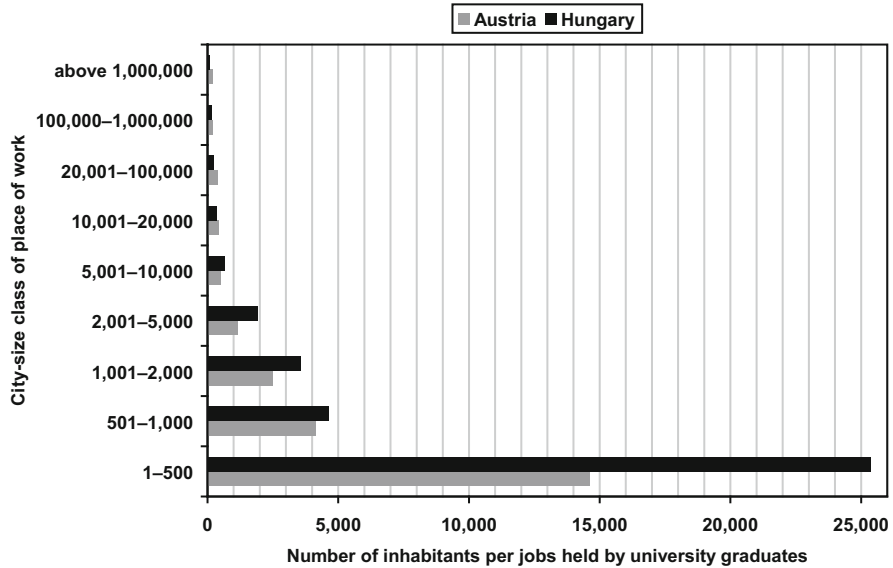


Fig. 8.16 Number of inhabitants per jobs held by university graduates in various city-size classes of place of work at the beginning of the 1980s in Austria (1981) and Hungary (1980). Design by author based on data from Meusburger (1995), p. 73

knowledge-intensive economic activities in the capital city where these were expected to give more stimulus to growth. The periphery, however, hardly had any benefits of these processes, and from the late 1970s onwards the first signs of economic depression in these areas became more and more visible (Nemes Nagy 2003, pp. 568–569).

In other words, despite the much-used slogan of equity in “real existing socialist” systems, these perpetually favored policies allocated disproportional investments to areas that seemed to utilize resources better and contribute more to national output indicators than other districts did. As can be seen, this was not only the case in the Soviet Union, but in communist Hungary as well. In fact, other Eastern European countries also had similar experiences with shrinking disparities between regions (Nemes Nagy 1987b, 2005), but remarkably strong and intensifying inequalities between urban and rural areas as well as large cities and small towns (Illés 2002, pp. 147–149).

It is important to underscore that these strategies or “fixes” were not only apparent in the USSR and in Eastern Europe, but in many cases they were also adopted by the Maoist leadership in China, although in the light of peculiar social and historical conditions and political circumstances their opposite might have seemed a more logical opportunity. During the civil war against Chiang Kai-shek’s Kuomintang, Mao and the Chinese Communist Party received the strongest support from poor peasants in the countryside. Cities, however, were not only regarded as “counterrevolutionary” and “capitalistic”, but, since most urban cores

along the Eastern coastline belonged to the Japanese occupation zone in World War II, their inhabitants were often exposed to criticism due to their claimed collaboration with Japanese authorities. To sum it up, “cities were associated with capitalism, imperialism and the Kuomintang” (Cheng and Selden 1994, p. 651). Besides, in the initial years Mao did not see much political potential in the working class, which in Western Marxist ideas was regarded as the engine of socialist revolution. This was no wonder given that China had only 12 million industrial workers during the 1950s, but some 600 million peasants (*ibid.*). Furthermore, Mao’s personal conviction was that a balance must be achieved between heavy and light industry and agriculture, and between towns and villages as well (Hunt 1989, pp. 227–238).

These considerations indeed had certain implications for measures of economic policy. During the First Five-Year Plan (1953–1957) agriculture was not exploited as systematically and dramatically as in the Stalinist USSR. Even later on, industry in most periods did not receive as disproportional support as in its Soviet counterpart. But these peculiarities of “real existing socialism” in China apparently did not overwrite the systemic drive for economic growth, which tendentially led to a concentration of resources into areas where a stronger multiplier effect was expected. The most obvious manifestation of this logic was the fierce artificial differentiation between villages and towns, where the former were exploited in favor of the latter. While as early as the 1950s the state took the responsibility of providing jobs, sufficient food and housing for all urban residents, in villages none of these was guaranteed. Instead, the countryside was left alone to organize and sustain services for itself. Moreover, from the mid-1950s onwards the introduction of the household registration system strongly limited the opportunities for migration from villages to towns, which ended up in an almost profound freeze on voluntary internal flows of population (Cheng and Selden 1994; cf. Wei 1997). This brought into being “two-track” systems even in basic infrastructures, e.g. in healthcare and public education (cf. Lo 1984), with a large gap between urban and rural settlements.

The obvious preference for cities was also mirrored by the regional aspects of investments, at least in four ways. First, the northeastern region of Manchuria, the dominant center of heavy industries in post-war China with a contribution of some 80 % to the national output of the branch (Ye and Ma 1990), all during the Maoist period received per capita investments well above the national average. The difference was especially striking during the phase of post-war reconstruction, when the Northeast gained per capita investments approximately four times the average of the country (Fig. 8.17). Second, the three largest cities, Beijing, Shanghai and Tianjin were major beneficiaries of the allocation of investments. There was no difference in the era when communist China was isolated in international politics (1960–1972), thus, it was free from Soviet influence and Mao initiated various campaigns with the claim of focusing resources in inland rural regions. Even in these years the three leading urban centers received two to four times as much investment in fixed assets than the national average (Fig. 8.17).

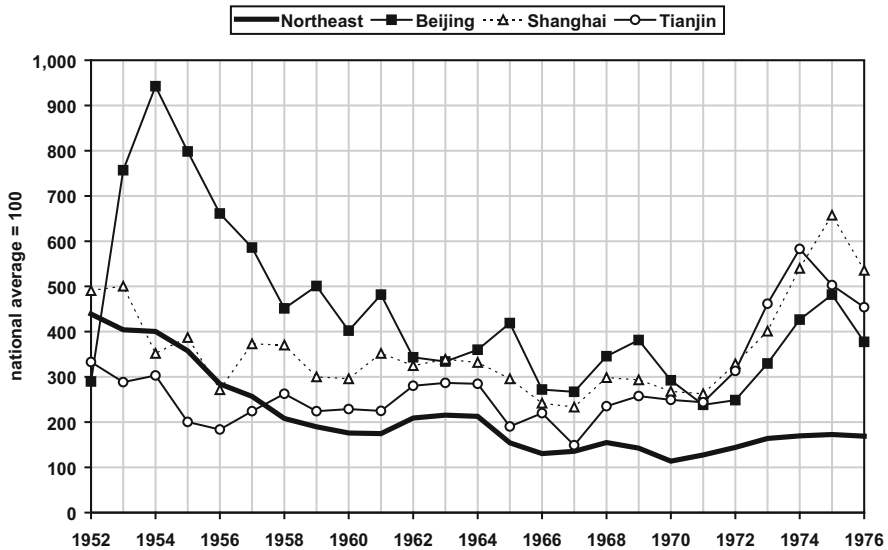


Fig. 8.17 Per capita investment in fixed assets in selected regions of China compared to national average (1952–1976). Design by author based on data from China Data Center (n.d.)

Third, the propagandistic campaigns of industrializing inner regions in many cases, especially in the 1950s, meant the allocation of gigantic new factories to the largest cities of rural provinces, usually to provincial capitals, and barely the construction of decentralized plants in small or mid-size towns (cf. Taubmann 2001; Wu et al. 2010, p. 26). Hence, these projects also intensified the urban–rural gap. Without a doubt, the so-called “Third Front” program in 1965–1971, for strategic reasons aimed at the industrial development of remote areas far away from China’s boundaries, provided a great deal of resources to the construction of military plants far away from large urban centers (cf. Ma and Wei 1997; Taubmann 2001). Still, as Fig. 8.17 presents, the Northeast of China and especially the three metropolitan areas on the east coast gained more attention and investments relative to their population. In other words, programs to spread industry over inland regions merely resulted in a greater emphasis put on remote areas, but in general they did not challenge the primacy of leading industrial centers of national importance.

Fourth, although political objectives in the Mao period underwent serious changes many times, and dramatic reversals also took place at some points, voluntaristic initiatives never endangered the fact that in cities basic needs were covered at least at a tolerable level. As was discussed with regard to Fig. 8.17, initiatives to allocate millions or even tens of millions of urban labor force to rural areas did not undermine the exclusive position of leading industrial centers. The same did not go for rural areas, however. This was well exemplified by the tragic events at the turn of the 1950s and 1960s. In 1958 Mao launched the Great Leap Forward campaign, which was expected through a forced growth both in agriculture

and industry to diminish in a few years the large gap China had compared to the leading industrial countries at the time. Since after the first months output numbers seemed to fall behind projections especially in heavy industry, a dramatic shift in resource allocation in favor of this branch and great urban centers was made. The consequence was a catastrophic shortage of labor force in agriculture and especially in certain rural areas, due to which the otherwise good yield in many cases remained unharvested. Hence, the Great Famine took place, resulting in the death of some 30 million inhabitants and in even more lost or postponed births in villages and small towns, a tragedy not even perceived in main urban centers where sufficient food supply was guaranteed (cf. Lin and Yang 1998; Riskin 1998).

We have to emphasize that these tendencies could not be interpreted simply as outcomes of Soviet pressure, where the Soviet Union, as the only military and economic supporter of the People's Republic of China in the 1950s (cf. Meng 2003, pp. 64–65), imposed its own interests on the Maoist leadership. Without a doubt, asymmetrical power relations with the USSR did indeed exist. Yet, it would be a gross oversimplification and even misinterpretation of the issue to trace back the strong urban bias of Maoist investment policy only to Soviet influence, since the preference toward urban centers did not change fundamentally after the Sino-Soviet split. In fact, the communist China sustained the same practice during its international isolation in the 1960s, and even after official relations with the United States normalized in the early 1970s. Hence, the preference of cities and towns as areas where investments seemed to bring more yield was much more than the result of inevitable Soviet influence; it was indeed a direct outcome of the logic of “real existing socialism”.

As can be seen, the first two of the “spatial fixes” that Harvey identified as typical strategies of capitalists to cope with “inherent contradictions” of capitalism had their analogies in “real existing socialist” systems as well. These were used to find new opportunities for the growth of production, which without these “fixes” would have been much slower. Harvey's third “spatial fix” was likewise present in socialist countries: that was “accumulation by dispossession”, which in fact was a cornerstone of the introduction of socialism in all cases in the form of collectivizations. This was carried through first in industry, which was regarded by communists as the engine of economic growth. In the USSR in 1928, just 6 years after the proclamation of the communist state, 82 % of industrial production was in non-private hands: 69 % belonged to public organizations and 13 % to cooperatives, but only 18 % to private producers. Moreover, the last category absolutely disappeared by the end of the Second Five-Year Plan in 1937. From then onwards, the only change was the gradual shrinking of the role played by cooperatives (to 8 % in 1950 and 3 % in 1960), and the maximization of the share of public organizations (to 92 % and 97 %, respectively) (Sherman 1969, p. 129). Some changes only began with the cautious introduction of some foreign investors into the Soviet economy in the 1970s, which we already referred to in previous paragraphs; furthermore, the emergence of private industrial actors from within the USSR remained an impossibility until the final years before the collapse.

In agriculture, which in the communists' eyes contributed less to growth, collectivization also took place, but at a considerably slower pace. As has been presented, as early as the late twenties the vast majority of industry was out of private ownership. In the year 1926–1927, however, still only 2 % of grain production went to state and collective farms, and 98 % to private farms. Of course, landowners had been totally dispossessed of their lands, and the share of rich peasants (*kulaks* in Russian terminology) decreased from 38 % in the last pre-war year (1913–1914) to 13 % in 1926–1927 (*ibid.*, pp. 65–67). Hence, the role of poor and middle-level peasants significantly rose, but a mass collectivization of agriculture was not on the horizon. Of course, the dominance of private property did not last for long, but in 1940 still more than one-fourth (27 %) of agricultural output was provided by private farms, and this value decreased below 15 % only in the 1960s (Pockney 1991, p. 229).

The strategy of “accumulation by dispossession” was not dissimilar in other countries of the Communist Bloc. In Soviet-occupied Hungary, collectivization began rather early in industry. First, coal mines were taken over by the state in 1946. They were followed by key plants of heavy industry some months later, before the largest banks and companies in any industrial branch were nationalized in 1947. The next year, 1948, witnessed first the collectivization of industrial enterprises with more than 100 workers. Finally, in 1949 the turn came for companies with more than ten (in certain branches five) workers, and for all foreign firms. As a result Hungarian industry, where national companies in 1945 represented only 10 % according to the number of employees, became almost completely non-private within 3 years (Csizmadia 1984, p. 21; cited and explained in Romsics 2010, pp. 310–311).

In agriculture this process was slower, in line with the Soviet example. After 1949, the creation of state farms and cooperatives gained impetus, and initial “achievements” came very fast. The amount of agricultural land in private ownership decreased from 98.0 % in 1949 to 59.7 % in 1953 (Pető and Szakács 1985, p. 188; cited in Romsics 2010, p. 354). This was, however, far from total collectivization, even if private producers suffered from the newly introduced system of agricultural deliveries, where farmers were forced to sell a certain part of their products to the state, often at prices much lower than production costs (Romsics 2010, pp. 350–351). Collectivization in agriculture increased again at the turn of the 1950s and 1960s. Yet, unlike in industry, some 11–12 % of agriculture (according to land area) remained in the hands of private owners, who, due to intensive methods, altogether provided one-third (32.8 %) of the sector's output even in the 1980s (Csizmadia 1984, p. 71; p. 138; cited in Romsics 2010, p. 445).

These data reveal two important tendencies. First that “accumulation by dispossession” is not a peculiarity of capitalist systems, but also played a decisive role in “real existing socialism”. The main motivations were also remarkably similar. Just as in capitalism, the dispossession of private property in socialism instantly provided additional resources to production (e.g. land, buildings, equipment), which thus would not be developed by the state at a high cost. In addition,

dispossession had an obvious positive effect on production in the long-term as well, given that the goods and services produced with the use of collectivized resources brought revenues (which could be invested again) directly to the state sector, not to private economic actors. The second remarkable point is that in socialist systems dispossession always came first in industry, and there it was carried through very quickly. In agriculture, however, the process ran at a moderate pace, and a complete collectivization of the sector was not achieved, not even in the Soviet Union. In Harveyian terminology, this difference between the sectors can itself be interpreted as a kind of “fix”. In fact, accumulation by dispossession is not without difficulties, since the adaptation, organization and management of newly collectivized properties constitutes a great burden for the state as well. This burden is, of course, usually not comparable with the advantage the state takes by gaining resources for free (on the basis of political power) that others had developed from their own resources. Yet, an immediate and profound overtaking of the economy could be a highly risky project for the state as well, which is otherwise interested in an unbroken acceleration of growth. But the opposite strategy, to let private owners have what they have managed for themselves, was likewise not an option for socialist systems, pushed by the drive for growth. Hence, it was not an illogical option to set the collectivization of the economy as the ultimate long-term goal, but leaving certain resources in private hands. The burden of managing these did not immediately fall on the shoulders of the state, and they were left as a sort of reserve for hard times when the state could run out of resources.

The underlying logic of Harvey’s fourth “spatial fix”, the export of devaluation, was also not alien to “real existing socialism”. For capitalism, Harvey’s claim was that capitalists had firm interests in imposing the crisis of overproduction and overaccumulation on others. This actually meant that if country A, for instance, destroyed the production of country B (e.g. in wars), B had no other option than to buy goods and services from A to cover at least the basic consumption of its own population. Moreover, if A destroyed production capacities in B, this could also make a third party, country C subordinated to A if C had been previously provided with goods and services by B. In other words, the main motivation behind this “spatial fix” is to make others unable to produce in order to create new markets for your products and cure the crisis of overaccumulation.

These considerations were crucial for communist leaders as well, although for them the main challenge was to avoid not overproduction and overaccumulation but *under*production and *under*accumulation (relative to the level considered by these systems as desirable). In consequence, their main goal was to block external attempts to export devaluation inside the Communist Bloc. This included on the one hand that others did not export their goods and services to socialist countries, which in the latter would have challenged the monopoly of local products, decreased sales and reduced resources for investment, which were already scarce. On the other, a crucial point was to avoid having economic actors extract resources, e.g., from local branches of their companies. In fact, both strategies persisted in socialist countries. The first step here was the collectivization of foreign companies, already mentioned as a form of “accumulation by dispossession”, due to which

capital of foreign origin was “fixed” in socialist countries, so that they could no longer be extracted. Similar considerations motivated Stalin’s decision that the countries occupied by Soviet troops had to reject the Marshall Plan, considered as a major capitalist project for the “export of devaluation”.

Later on, the main strategy in the Communist Bloc to hinder external economies in exporting devaluation was the reduction of economic ties with the capitalist world. This led to strong autarchic attempts, especially before the post-war period, when the Soviet Union did not have any allies with the same economic system. As the bloc expanded after 1945, the policy of standing on one’s own feet was mainly promoted with regard to the whole of the socialist world, where the new goal was to establish a “socialist world market”. This idea was put in practice very rapidly. As Fig. 8.18 reveals, most countries in Eastern Europe concentrated 70–80 % of its foreign trade within the Communist Bloc, a remarkable increase relative to previous values. For instance, before World War II the Hungary’s trade with future socialist countries was less than 20 % for imports and only 10 % for exports. In 1948, 3 years after the country was occupied by Soviet troops and in the year when the communist dictatorship was brought into being, orientation toward socialist countries was already stronger, but still not decisive: slightly above 35 % both for exports and imports (Pető and Szakács 1985, p. 94; cited in Romsics 2010, p. 316). The 1958 data of 71.9 % should be interpreted in the light of these historical conditions.

In fact, autarchian efforts dominated international relations not only with the capitalist world, but, despite political attempts to deepen economic integration within the Communist Bloc,⁵⁷ between socialist countries as well. Using the terms of Harvey, this can be interpreted as a peculiar outcome of the chronic drive of socialist economies to avoid that “devaluation” is “exported” from the capitalist world. In order to block such problems, a characteristic manifestation of which was imbalanced trade, the Comecon was organized along the principle of a balanced flow of goods. As Illés (2002, pp. 36–38) points out, this brought into being a system where not only the volume but even the structure of trade had to be balanced among countries at the level of basic groups of commodities (thus, raw material had to be sold for raw material, food for food, machinery for machinery etc.). Consequently, trade was rather rigid, which from the late 1950s onwards resulted in a gradual decrease of foreign trade compared to output indicators. (The only exception was the Soviet Union itself, which could take advantage of its political and military dominance within the bloc and sustain bilateral flows of goods even if those were highly asymmetric and disadvantageous for satellite countries [ibid.])

⁵⁷ The first such initiative was the establishment of the Comecon (Council for Mutual Economic Assistance) in 1949, with the task of promoting economic integration within the Communist Bloc. In the 1970s several measures were taken to intensify the activity of the council, although results of these fell behind expectations (Bartke 2003, p. 111).

Country	1958 (exports plus imports)	1963 (exports only)
Bulgaria	86.0	79.8
Czechoslovakia	70.3	70.4
East Germany	79.5	76.1
Hungary	71.9	n.d.
Poland	58.4	60.1
Romania	77.9	67.4
USSR	73.8	63.3

Fig. 8.18 Intra-bloc trade as percent of total trade turnover of the countries of Eastern Europe (1958, 1963). Adapted from Sherman (1969), p. 198

As can be seen, virtually all four sorts of the Harveyian “spatial fix” had their counterparts in “real existing socialism”, where the objective of these was to handle the contradiction between the notion of accelerating growth and a constant increase in the standard of material well-being of the population, mainly through revealing additional resources for investment. Additionally, what Harvey called “temporal fixes” in his 1982 essay also mirrored endeavors similarly inherent not only in capitalist but in socialist systems as well. For Harvey, the first kind of “temporal fix” was investment in built environment, chiefly in construction that was expected to contribute to an even higher rate of profit in the long term as soon as it was finished and installed. Thus, if the condition of overaccumulation hindered a profitable investment of capital in the short term, capitalists oriented towards projects that instantly sucked up otherwise unutilizable resources and, although they could not contribute to the production of profit in the short run, had the potential to bring surplus profit in the long term. This kind of “selling the present to buy the future” logic was profoundly characteristic to socialist systems as well, which were ready to almost fully sacrifice short-term production and consumption for long-term objectives.⁵⁸

One outcome of this consideration was high investment ratio, which we have already discussed in previous paragraphs. But that was not all. For the same reasons, “real existing socialist” systems tried to divert resources from “less productive” and “non-productive” branches (e.g. agriculture, production of consumer goods, services) to activities considered as “most productive” (such as mining and heavy industry). As Fig. 8.19 illustrates, in the USSR as early as the 1920s and 1930s heavy industry was strongly overrepresented in capital investments relative to the industrial production of consumer goods. While the former absorbed more than one-sixth (17.7 %) of all capital investments, the latter

⁵⁸ This readiness was exemplified by the much-cited words of the Hungarian Stalinist leader Mátyás Rákosi from 1950: “If we do not take a moderate stance, we eat as fried chicken the hen that would lay a golden egg next year, and we would consume in form of branded butter and fried veal the factories, plants and cultural buildings of our five-year plan.” (Rákosi 1951, p. 141).

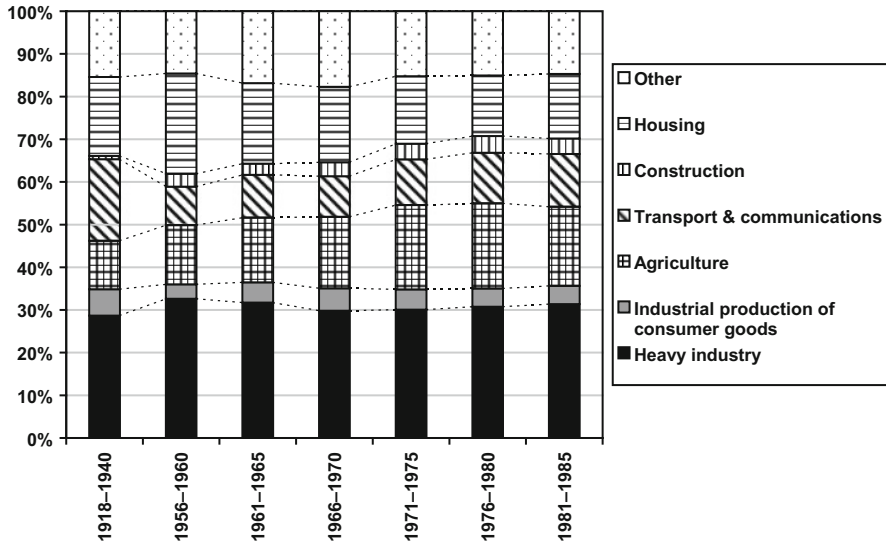


Fig. 8.19 Capital investments in main sectors of the economy in the Soviet Union (1918–1940 and 1956–1985). Values refer to investment in production items and are compared to the national total. The category “Other” includes construction of trade and communal enterprises, timber and procurement enterprises, and institutions of science, art, education and health. Design by author based on data from Pockney’s (1991, p. 100) collection of official Soviet statistics

received only 3.8 %. The relative negligence of agriculture was likewise striking with its value of 7.0 % in a country where in 1940 still 54 % of the labor force was engaged in this sector (cf. Pockney 1991, p. 67).

This extremely asymmetrical distribution of investments exerted strong influence on growth in individual branches as well (Fig. 8.20). During the First Five-Year Plan (1928–1932) civil machinery achieved annual average growth rates of 28.2, and 16.0 % during the second plan period. For intermediate products (including metals, fuels and construction materials as well as electricity), corresponding values reached 16.5 and 10.1 %. In the meantime, consumer goods production remained much more moderate (2.1 and 8.5 %), while agriculture first underwent a serious decline (–5.5 %) before entering a phase of stagnation (1.0 %). Although these trends seemed to change temporarily in the last year before World War II, this was rather a proof of decline in *civil* machinery in a period when military expenditures (and the output of machinery for military ends) began to boost. In sum, a disproportional share of investments went either directly to the construction of facilities of production or to the production of raw material and equipment necessary for such construction projects.

For the post-war period, some modifications took place in the distribution of investments under the Khrushchev administration and the early period of Brezhnev’s reign, with the proportion of agriculture gradually increasing from 11.3 % above 15 %, and later on close to 20 % (Fig. 8.19). This shift, enforced

	1928– 1932	1932– 1937	1937– 1940	1950– 1955	1955– 1958	1958– 1961	1961– 1965
Industry	10.6	10.1	1.9	11.7	9.5	8.6	7.3
<i>including:</i>							
intermediate products	16.5	10.1	2.5	10.6	9.5	7.8	7.0
machinery*	28.2	16.0	–6.0	13.6	10.9	12.0	9.4
consumer goods	2.1	8.5	3.3	9.9	7.4	5.7	4.3
Agriculture	–5.5	1.0	–1.4	4.7	7.2	1.7	1.2

Fig. 8.20 Average annual growth rates of output in selected economic branches in the Soviet Union (1928–1965). *Machinery includes only civilian machinery in the pre-WWII period and total machinery for the post-war era. Adapted from Cohn’s (1970, p. 28) collection of official Soviet statistics

by chronic problems in food supply, seems even more important given that in the same period the proportion of labor force engaged in agriculture declined from 54 % in 1940 to 25 % in 1970 and 20 % in 1980 (Pockney 1991, p. 67). Still, the privileged position of heavy industry did not change significantly, and the negligence of consumer goods production became even more striking. In consequence, the pace of growth in agriculture fell far behind that in industry even in the decades after Stalin’s death (Fig. 8.19).

Beyond a high rate of investments and a strong preference for heavy industry, socialist systems had an apparent drive for the establishment of factories, power plants, infrastructure etc. of the largest size. These were considered due to economies of scale to have the greatest implication on growth in the long term. Hence, no wonder that one of Lenin’s first objectives, which brought the whole mechanism of economic planning into being in the Soviet Union—was electrification of the entire country. In line with the corresponding Goelro Plan, a network of 30 new power stations was built, among which ten were gigantic hydropower stations (Neporozhnii 1970; Lapin 2000). This trend continued in the Stalinist period and after the World War II as well. It speaks volumes that during the 7th to 11th five-year plans (between 1961 and 1985) in each plan period 48,000–51,400 MW of new capacity was installed in power plants (roughly equivalent to five Hoover Dams per year), with 7,500–11,800 MW added by hydroelectric stations (Pockney 1991, p. 150). Also typical was the construction of new industrial towns, railway lines (e.g. that of the more than 4,300 km long Baikal Amur Mainline between Siberia and the Soviet Far East), and canal systems.⁵⁹ Meanwhile, for agricultural reasons thousands of kilometers of shelterbelts were planted in order to protect arable land from wind erosion (Brain 2010; Hajdú 1999). Without a doubt, these investments consumed a great deal of resources that were lost for short- and mid-term production

⁵⁹ In 1975, the total length of artificial inland waterway routes in the Soviet Union was 19,000 km (Antal 1980, p. 431), roughly equivalent to the sum of *all* waterways in France, Germany and the United Kingdom at the end of the 2000s (cf. CIA, n.d.).

as well as consumption. But they indicated the regime's endeavor to find additional opportunities for accelerating long-term growth, for instance by giving priority to enormous projects at the expense of investments of a small dimension, which could have stimulated growth faster, but this growth would have been moderate.

Similar motivations and, in consequence, similar "fixes" were apparent in other socialist countries as well. The forced development of heavy industries was on the agenda in Eastern European satellite countries as well, irrespective of natural conditions and whether they were preferable to such branches. Stalinist Hungary, for instance, poor in mineral resources, was supposed to become "the land of iron and steel" (cf. Romsics 2010, pp. 346). In an economic sense, this initiative went back again to a socialist interpretation of increasing production. In fact, immense industrial projects effectively contributed to production only after the phase of construction lasting for several years, and even then they required a mass import of raw materials for production. Yet, due to economies of scale these factories were expected to stimulate extreme growth in the long-term, due to which they were worth in the eyes of communist leaders to be supported. For this reason, the First Five Year-Plan of 1950–1954 allocated half of investments in industry and construction, while services gained a bit more than one-third, and agriculture only 14 % (Bartke 2003, p. 107)—of which a considerable part went to gigantic Soviet modeled projects aimed at large-scale forestation and other attempts to "transform nature" (cf. Gyuris and Győri 2013). These values gradually changed after the 1956 revolution (the share of industry of investments decreased to 42 % in 1958–1960 and to 34 % in the early 1960s) (p. 108), and less raw material resource intensive branches (e.g. machine industry, food industry, textile industry) were put in the forefront. But as reflected by the dynamics of output as well as employment indicators (Fig. 8.21), the role of industry remained privileged in general at least until the late 1970s, when the specific reforms of Hungarian "goulash communism" enabled the service sector to take the lead.

Similar processes emerged in Maoist China. In fact, Mao initially suggested a balanced improvement in heavy industry, light industry and agriculture. Once in power, however, he apparently changed his mind and gave priority to activities where investments seemed to contribute better to robust long-term growth, even if at the expense of short-term consumption. As Ma (1983, p. 24) underscores, during the First Five-Year Plan between 1953 and 1957, 38.7 % of total investments went to heavy industry, and this ratio increased to 52.8 % until 1978. The aspect of economy of scale also played a crucial role here. In the first plan period, for instance, the 156 key projects launched with Soviet assistance mostly concentrated in altogether 8 industrial agglomerations (cf. Wu, Sui and Zheng 2010, p. 26). Even during the "Third Front" initiative in 1965–1971, when a great many plants of strategic importance were established in remote areas of the country, investments were dominated by the creation of large-scale industrial bases and immense infrastructural projects (e.g. railway construction) (cf. Ma and Wei 1997). Meanwhile, the asymmetrically low investments in agriculture were to a great extent also concentrated in large projects, such as those aimed at a radical transformation of nature in northwestern regions (cf. Betke 1998).

Economic sector	1950	1960	1975	1985	1990
Agriculture	51.8	39.0	22.3	20.2	14.9
Industry and construction	22.4	34.1	43.4	38.5	38.4
Other sectors	25.8	26.9	34.3	41.3	46.7

Fig. 8.21 The distribution of labor force among economic sectors in communist Hungary in percentage of the total (1950–1990). Adapted from Bartke (2003), p. 117

Finally, Harvey put emphasis on the important role of the financial system, which is claimed to contribute to the maximization of profits in capitalist systems mainly by enabling capitalists to carry out investments as efficiently as possible. The financial system gives them the opportunity to mobilize capital in form of money, due to which it easily gets access to investment possibilities, reducing both cost and time of circulation. Moreover, it functions as the nervous system of the market, which in a barometer-like way reflects the expectations of the great many actors in economic life, transferring valuable information and helping capitalists to find the best investment opportunities. Last but not least, the financial system, precisely because of its ability to transform all sorts of capital into money, enables the centralization of capital, which is a crucial prerequisite for investments above a certain scale. In other words, the financial system opens the way for projects that in the long term can bring high profits, but that cannot be realized without a sufficiently large amount of resources. In sum, the “temporal fix” function of the financial system originates from the assistance it can provide for capitalists in finding spatial and temporal “fixes”.

Again, the factors that make the financial system so important in capitalism were likewise present in “real existing socialism”, where both the mobilization and centralization of capital was crucial, just as the presence of a system which informed economic decision-makers about the possibilities of stimulating growth. In accordance with these needs, socialist systems also had a mechanism aimed at fulfilling these functions, but instead of a sort of financial system (which served rather as a “bookkeeper of the state” and had no real power in these countries; cf. Meusburger 1995) it was the centralized, authoritarian state bureaucracy. The objective of mobilizing *any forms* of capital was to be achieved by a military-like system, where commands from above had to be obeyed and executed at virtually any cost. For example, the relocation of labor force to the coldest northern periphery or to the hottest deserts in Central Asia could be carried out at a pace unseen in democratic or decentralized systems. In the meantime, migration unwanted by the leadership could be controlled and principally blocked. Of course, the rigor of this control could be different to some extent in various countries and under different leaders, and efficiency often fell behind expectations.⁶⁰ But the system imposed

⁶⁰ This additional idea is necessary since the control of population flows was not always as perfect as the leadership hoped and as foreign observers often thought. As Buckley (1995) underscores, the Soviet internal passport system introduced in 1932 was indeed expected to keep flows totally under control since resident permit (*propiska*) prohibited its owner to reside at another place than

limitations on inland migration that would hardly have been possible in any liberal democracy.

The same was true for the flow of non-human forms of capital as well, such as raw materials. Due to a centrally controlled price system, which was highly independent of demand and supply, the policy of donations enabled the (in fact seemingly) cheap transportation of such goods if it was in the interest of the central decision-making. In the USSR this was especially obvious in railway traffic, which was run at much lower prices than the actual cost price of the service (Trejvis 2008). All these attempts had the same objective as the Harveyian “fixes” in capitalism: to enable resources to migrate to where investment opportunities were considered as better, in order to reduce cost as well as time of circulation and, thus, to contribute to the highest growth possible in a system lacking sufficient resources for investment.

The role of a “nervous system” was also not missing in socialist systems, but given the lack of market mechanisms it was fulfilled by central economic planning. This functioned on the one hand from the point of view of national planning authorities as a “barometer” of economic conditions at lower levels, just as the financial system reflects the changes in preferences and expectations of individual capitalists in market economies. The first step of planning was that enterprises created draft plans, which had to mirror their goals as well as their capabilities, so thus they not only indicated local interests but also had to provide detailed statistical information on actual circumstances. These draft plans were first submitted by enterprises to local authorities, then to branches of the State Planning Committee (Gosplan) in Soviet republics, and finally to the all-union headquarter of Gosplan in Moscow, which in consequence gained information from lower levels. But the planning process did not follow a one way path. While draft plans “migrated” upwards within the system, Gosplan received information from above as well, namely the general national goals from the USSR Government. Then, Gosplan created an initial plan, which considered both expectations of the central leadership and local conditions, similarly as individual investors make their decisions in capitalism in the light of information the financial system mediates to them.

This initial plan created by Gosplan roughly clarified the task for lower level authorities as well as enterprises. Hence, the planning mechanism also served as a system giving orientation to lower level units from higher authorities. In this phase, local authorities and enterprises had the opportunity to indicate the supplies they needed for the realization of the goals they were given according to the initial plan.

given in the document. Through bribery and due to inefficiency of state control, however, many managed to migrate without the official permit. Hence, although the system gave state bureaucracy “the illusion of control” (p. 910), managed migration was more “myth” than reality (p. 896). No doubt, the Chinese system was much stricter and more efficient in the period between 1960 and the beginning of post-Mao reforms in 1978 since it brought unwanted migration virtually to a halt. This had been, however, impossible without the widespread use of rations over the whole period (even for most basic goods), which were only valid in one’s official place of residence (Cheng and Selden 1994). Yet, the Maoist example was rather an exception among socialist countries than the norm.

In fact, this was the phase of bargaining. In the light of this feedback, Gosplan informed the government about its resource needs, and tried to establish a balance between bargains from below and expectations and commands from above. In the last phase the government made the final political decisions about the plan,⁶¹ which through Gosplan was mediated to lower authorities and enterprises, who now received detailed specifications, which they principally considered as a set of commands that had to be executed.⁶²

Hence, regional and local administrative units as well as enterprises received the central plan as an information source of vital importance mediating the interests and objectives as well as the capabilities of the national level, thus, the Soviet leadership. Just as capitalist investors try to adapt to changes indicated by the financial system in order to realize higher profits, Soviet enterprises likewise shaped their strategy in line with instructions of the central plan, since this was their best chance to aspire to more state support in the succeeding plan period. In other words, central state planning had basically the same indicative functions in the USSR that the financial system has in market economies, but with a major difference. The mechanism of state planning fulfilled these functions through the maintenance of highly asymmetrical power structures, which thus became inseparable from the very functioning of economy in “real existing socialism”.

The role of financial system in the centralization of capital was necessary for the realization of large projects and, consequently, to an expected acceleration of growth in the long run, not only in capitalist systems, but in socialism as well. This tendency had visible consequences at many levels. For enterprises, production of given goods was concentrated in the hands of great trusts. These were usually not only responsible for a stable growth in investments as well as production, but also for contributing to the social infrastructure at their place of location. It was not untypical, for instance, that the vast majority of production in major industrial centers was added by a single mammoth company, which provided a fundamental contribution to local healthcare, education, cultural and sports life etc. (Horváth 2006). But the notion to centralize capital was reflected by the structure of central administration as well. Executive power was in the hands of supersized ministries attributed to specific branches (such as the Ministry of Oil and Gas Industry, Ministry of Coal Industry, Ministry of Agriculture etc.). Furthermore, the political competence of making decisions about the use of resources was concentrated in just a few. Executive power officially went to the Council of Ministers, an organ with up to 100 members. But this organ was in fact under control of the Secretariat, a committee made up by only 10–15 members, and practically led by the General Secretary Sherman 1969, pp. 7–10. Therefore, decision-making over resources was in

⁶¹ We should stress that the USSR Council of Ministers, composed of 30 to 100 members, was in fact the top organ of the executive branch, but it was in fact subordinated to the top party leadership, namely the Secretariat (cf. Fig. 8.21; Sherman 1969, pp. 7–10). Hence, final decisions about the plan could only be made with the approval of this organ.

⁶² For an in-depth description of the mechanism see Sherman (1969), pp. 138–142 and Bernard (1966), pp. 63–88.

the hands of a few, and finally under control of a single person. This concentration of power was especially remarkable given that commands from above could hardly be rejected (or sabotaged) by lower administrative levels. In other words, “real existing socialism” resulted in a strong centralization of decision-making about investments that was unparalleled in pluralistic democracies with capitalist economies.

As this large number of examples indicates, the strategies that Harvey called “fixes” are not unique to capitalism at all, but they were also present in “real existing socialism”. Moreover, the nature of these “fixes” was also similar in both systems. “Fixes” in socialist countries were no less controversial than their capitalist counterparts, even if in socialism private property was reduced to the minimum. Besides, they led to considerable unevenness in a geographical sense not only in capitalism, but in socialist systems as well. These similarities can easily be presented through some examples.

Controversies became manifest in many ways. The first form of controversy was when a “fix” became an obstacle to its own maintenance. The strategy of syphoning off resources from satellite countries, for instance, was not sustainable forever since it gradually reduced the amount of extractable resources left in the “allies” and, thus, eliminated its sources. Moreover, this process obviously limited the maneuvering room for local communist elites, which was to undermine their power and, consequently, the reliability of transports from these countries to the Soviet Union. No wonder that the policy of syphoning off weakened after Stalin’s death, and, as Bunce (1985) underscores, satellite countries in Eastern Europe rather became “from a Soviet asset to a Soviet liability”. Likewise, the “opening up” of “pioneer regions” and their integration into the national economy worked against itself in the long run. As a new territory began to be exploited, it soon became unavoidable to expand toward new districts. But as the spatial extension of still “unused” areas shrank, prospects for this strategy changed for the worse. Neither was the situation better in regions preferred by investment policy, namely in highly industrialized zones and large cities. Here the extreme high density of investment ended up in overconcentration of economic activities as well as population, which tended to erode productivity. That was a main reason for many planners to urge for a ban on or at least a limitation of industrialization in the largest urban centers, a policy carried out less efficiently in the Soviet Union but more thoroughly in the post-Stalinist communist Hungary (as was presented). “Accumulation by dispossession” was also a self-consuming process given that the pace of collectivization necessarily decreased as the amount of resources in private hands reduced.

In a peculiar way, the temporal “fix” of “selling the present to buy the future” through gigantic projects, which consumed vast resources in the present but were expected to accelerate growth in the long term, was also controversial, exactly for the same reasons Harvey identified in capitalism. In fact, these projects not only needed much time to be carried out, but they were planned to function for decades or even hundreds of years. Moreover, this extremely long “life expectancy” was more than a technical possibility; it was also an economic necessity in sense that a real turnover of these projects seemed possible only in decades’ time. In other words, these projects, while postponing present production and consumption for

what expected to be a much larger output in the future, posed a strong limit to opportunities of future planners. These had to spend a great deal of resources on the maintenance of large buildings, infrastructure etc. planned by their predecessors, so they could not focus as many resources on long-term investments as it had been possible otherwise.

Centralized bureaucracy and planning was also an obstacle for its own efficient functioning. On the one hand, attempts to achieve an extreme mobility of capital (or a strong immobility of it, depending on the actual case) deprived the system of the chance of receiving sufficient feedback in time about possible risks and unwanted consequences of central decisions. Since ordinary citizens had almost no way to express their dissatisfaction, and as experts as well as decision-makers at lower levels could only execute higher commands without criticizing or questioning them, even the most unrealistic initiatives of the top leadership could go through. This could result in serious economic malfunctions, which therefore hindered an efficient mobilization of resources in the future.

Likewise, the logic of running a centralized planning mechanism was at least as strong *against* as *for* promoting efficiency. The expectation was that the highest growth could be achieved if all pieces of information were collected from all over the country, and then was evaluated by the best experts and up to homogenous and high standards. The cross-section of channels mediating information from below to above was necessarily insufficient, however. As we have already underscored, the immense amount of information and knowledge spread over hundreds of millions of people living in a country the size of a continent could not efficiently be transmitted to a few hundred or thousand “wise planners” sitting in their Moscow bureaus. For this reason, much information was simply lost, and the central plans, to which local authorities and enterprises had to adapt, often left actual resources at lower levels unused. In other cases plans from above calculated with the mobilization of resources simply not accessible for local authorities or enterprises in the quantity or quality expected.

Furthermore, local production units and authorities soon realized that their tasks as well as their support from above depended less on their actual situation but on the information they provided to central planning institutions. Hence, they developed various strategies to justify even irrational demands of resources on the one hand, and to convince higher authorities that the plan was achieved, if it was not necessarily the case. For the first issue, local authorities, for example, tended to present remarkably optimistic or even unrealistic forecasts for their own population growth in order to gain surplus resources for investment projects (Bernhardt and Reif 2009). For the second point, it became a common habit of enterprises to fulfill plan indicators as easily as possible without providing the efforts the creators of the plan in fact expected. For instance, if manufacturing of a given product was measured in gross output, enterprises often did as Bernard (1966) explained: “Since the value of gross output includes the price of all raw materials used in manufacture, production targets could sometimes be reached . . . simply by increasing the quantity or the quality of the materials used; this may well be the real reason for the weight of so many Soviet products, which are often noticeably heavier than

comparable foreign articles” (p. 161). Of course, these manifold problems undermined the efficiency of the whole planning mechanism.

In fact, the various forms of “fixes” could not only become obstacles for themselves, but different fixes often counteracted each other. For instance, the drive for autarky (in order to avoid that capitalist countries “exported” their evaluation to the Communist Bloc) was highly incompatible with the notion of technological and organizational innovation. On the one hand, socialist economies sustained a relatively low level of trade with capitalist countries, because they expected this sort of autarky to guarantee that problems of the capitalist world economy could be kept outside. This notion was so strong that even in the 1970s and 1980s the USSR spent some 17–19 % of its GDP on the development and sustenance of a military (Steinberg 1992) whose main task was to deter satellite countries from a definite opening to the West and the capitalist world from trying to enforce the same from outside. In the meantime, especially from the Brezhnev era onwards, the Soviet leadership tried to find alternative ways of transferring technology from the West, which they considered as a crucial prerequisite for the competitiveness of the Communist Bloc. These goals, in fact, were contrary, so thus the amount of resources they consumed was immense relative to their contribution to these countries’ economic performance.

In sum, neither the existence nor the controversial nature of “fixes” was a peculiar feature of capitalism; “real existing socialism” was likewise not free from these. And just as these strategies resulted in an “uneven geographical development” in capitalist countries, so they did in the Communist Bloc as well. At this point we have to consider, of course, that Harvey’s critique had a specific meaning. As already discussed in previous paragraphs, Harvey broke with “classical” leftist concepts about “how core locations exploit peripheral ones” (Sheppard 2006, p. 129). Thus, his main critique was *not* that capitalism would produce a permanently increasing gap between “developed” and “underdeveloped” areas. Instead, he emphasized that capitalism had an inherent notion to “the production of geographical difference” (Harvey 2000, p. 79), thus, a permanent instability in spatial configuration. In other words, Harvey blamed the capitalist system for permanently creating spatial disparities, but without claiming that this process would necessarily mean the intensification of already existing inequalities, thus, a permanent worsening in center–periphery relations. In consequence, if we say that the problem of “uneven geographical development” Harvey blamed on capitalism existed in “real existing socialism” as well, it is not enough to present, for example, the permanent increase in the gap between rural and urban areas, and even between small towns and large cities. We shall likewise present that socialism not only increased disparities in many senses, but also that it failed to sustain a stable spatial configuration of economy and society.

And this is the point at which we have to refer again to the controversial nature of “fixes” in socialism, first because they often became obstacles for themselves after a while, and second since they in many cases aggressively countervailed each other. These paradoxes ended up in permanent changes in the spatial configuration of inequalities. For instance, the “opening” up of “pioneer regions” led to a decrease in

the level of concentration of economic production. Pumping investments in more efficient districts, however, rather pointed in the opposite direction. And since these two forces never achieved an equilibrium, their strength relative to one another permanently fluctuated, so that changes in spatial configuration (and in its inequalities) never ended. Likewise, tendencies at different scales could also contradict each other. Gigantic investments in towns in remote areas could boost absolute as well as per capita indicators of production in these urban centers. Hence, the regional distribution of urban resources became more balanced, regional inequalities decreased. The gap between this urban center and the thousands of villages in the same remote district, however, remarkably increased. To sum it up, “real existing socialism” was no more efficient in promoting an “even geographical development” than capitalism.

8.2.3 Empirical and Theoretical Remarks on the Uneven Development Concept: A Summary

With the closing statement of the last section we have returned to the link between economic systems (or modes of production), “uneven geographical development”, and spatial disparities. Harvey, Smith and many other Marxist theoreticians claimed that uneven development was “the hallmark of the geography of capitalism” (Smith 1991, p. xiii), that “the resulting geographical patterns are thoroughly determinate . . . and are thus unique to capitalism” (ibid.). Furthermore, they argued that “the only ultimate resolution to the contradiction [leading to uneven development] lies in the elimination of their source, in the creation of fundamentally new social relationships – those of socialism” (Harvey 1982, p. 103). As our examples showed, “uneven geographical development” is not an inherently capitalist phenomenon. Its outcomes are definitely *not* unique to capitalism. And “the creation of fundamentally new social relationships” fails to cure the problem, even if these new relationships are based on an almost profound collectivization of resources and on the lack of private property. These findings are of strong political relevance. They reveal that Marxist authors on “uneven geographical development”, although contributing much to a better understanding and theoretical conceptualization of the persistence of inequalities and its roots, attributed exclusively to capitalism phenomena that are present in non-capitalist systems as well. Without a doubt, this act helped much in presenting capitalism as a vicious system, which is indeed the main source of problems in contemporary society, unavoidably “unjust”, and therefore should give way to socialism. But the cost of providing support to socialist political goals and of creating leftist propaganda was high. Namely, a one-sided and enforced interpretation of real phenomena, a remarkable silence about sensitive questions (spatial inequalities in countries of “real existing socialism”) and the hindrance of a better understanding of problems (such as spatial disparities) in

their actual complexity. Hence, Marxist concepts of “uneven geographical development” are similar to so many other theories in the history of spatial disparity discourse. They exemplify how political considerations and the will to create and disseminate orientation knowledge influences (and distorts) the production of factual knowledge about spatial inequalities.

It is, however, not the only questionable feature of related Marxist concepts that they tend to blame all social problems exclusively on capitalism, even if these in fact were present in socialist countries as well. In other words, it is not the only problem that these theories create an extremely contrasted black and white image of the world, with “bad” capitalism on the one side and “good” socialism on the other. Another crucial point is their remarkable oversimplification of the factors driving various systems. Following Marx, Harvey traced back the whole functioning of capitalism to a single rule “that governs the behavior of all capitalists” (Harvey 1982, p. 29), namely to “accumulation for accumulation’s sake, production for production’s sake” (ibid.).⁶³

In fact, Harvey did not argue that individuals would have been so one-sided in their motivations. Hence, it was not his point to suggest that human beings were inherently driven by a single notion, such as *homo economicus* in classical and neoclassical economics. Instead, he claimed the capitalist system itself imposing this one-sidedness on individual capitalists. As he put it: “In so far as individuals adopt the role of capitalist, they are forced to internalize the profit-seeking motive as part of their subjective being. Avarice and greed, and the predilections of the miser, find scope for expression in such a context, but capitalism is not founded on such character traits – competition imposes them willy-nilly on the unfortunate participants” (p. 28). That is why the rule of “accumulation for accumulation’s sake . . . operates *independently of the individual will of the capitalist*” (our emphasis; p. 29). In other words, the Marxist point of view, adopted by Harvey as well, was that of *systemic determinism* or, if one considers systems as modes of (economic) production, of *economic determinism*.

This interpretation raises a crucial question. For Marx (and for Harvey as well) it was competition that led to a fierce rivalry among capitalists, where they virtually had to fight for survival, so thus they had no alternative to internalizing the “rules” of capitalism and adapting themselves to these. For him: “*free competition* brings out the inherent laws of capitalist production, in the shape of external coercive laws having power over every individual capitalist” (our emphasis; Marx cited in Harvey 1982, p. 28). This might well be the outcome of an absolutely free or *perfect* competition, where everyone in any situation has to compete, and where, referring

⁶³ The totalization of this single factor does not leave any space for other considerations otherwise very important in all systems. One can briefly refer here to the strategic (military), political or symbolic reasons, which can enable as well as disable certain investments both in capitalist and non-capitalist systems. Even in capitalism, the Statue of Liberty in New York, representative buildings in Washington DC or World War II memorial sites in Normandy have been erected not only (or basically not) for pure economic considerations, as outcomes of “accumulation for accumulation’s sake”.

to Spencer's neo-Lamarckian thoughts in the nineteenth century (cf. Sect. 2.3.9), only the strong survives and the weak necessarily falls. But real life is not so. And if competition is not perfect, hence, individuals have at least some limited opportunities to survive without profoundly internalizing the logic of the system, they will not feel it necessary to adapt totally. Neither are they forced to do so, actually, given that they can definitely survive without fully giving up their individual motivations, thoughts, passions etc. For this reason, the whole Marxian interpretation of capitalism (and Harvey's concept as well) functions only if one assumes perfect competition. In other words, the theory is based on the same unrealistic presumption that constitutes a cornerstone of classical and neoclassical economics (cf. Sect. 6.6).⁶⁴

In an interesting way, Harvey himself also realized the problem of hypothesizing perfect competition, so he tried to explain why this assumption was "tolerable" in Marx's work even if it is otherwise commonly referred to as an apparent shortcoming of neoclassical economics. In his words: "The assumption of perfect competition plays a very different role in Marx's theory to that which it plays in conventional economics. Marx uses it to show how, even when capitalism is operating in a manner considered perfect by the bourgeois political economists, it still entails the exploitation of labor power as the source of profit" (Harvey 1982, p. 28). Thus, Marx was claimed to have this assumption just for rhetorical reasons, to exemplify why capitalism unavoidably produced unjust situations even if it functioned "perfectly", in a "pure" form. This interpretation can be challenged easily, however, given that the whole Marxian concept about the behavior of individuals is based on the implicit assumption of perfect competition. In other words, Marx did not simply use a sort of "pure capitalism" to illustrate controversies of the system, but traced back these controversies to factors only persisting under conditions of perfect competition. The simplistic idea of how the capitalist system enforces through competition all individuals to profoundly subordinate their souls to the rule of "accumulation for accumulation's sake" only works if competition is perfect and omnipresent. Otherwise the systemic or economic determinism infiltrating Marxist theories (even those of Harvey) becomes unsustainable, and the interpretation of capitalism they provide gets challenged, including thoughts about "uneven geographical development" in capitalist systems.

In sum, the Marxist concept of "uneven geographical development" opened a new chapter in the spatial disparity discourse through *re-problematizing* the issue in a context where various other approaches have interests in inequalities, but without paying attention to normative considerations. Compared to Krugman's "New Economic Geography" as well as to endogenous growth theories, the approach developed by Harvey, Smith and other leftist theoreticians has the apparent aim to

⁶⁴ This common feature of Marxism and classical economics may well be understood given that the roots of both went back to the same context, that of nineteenth century Britain, especially its urban industrial districts during the industrial revolution. Yet, an unrealistic assumption does not become realistic just because it is internalized not only by one theoretical approach but by several.

represent voices that find spatial inequalities a *problem* to be solved. Furthermore, given that this stream has mainly been run by geographers, relative to concepts originating from other disciplines it has proven to be much more sensitive to issues concerning the theory of space. For political attitude, the uneven development concept clearly returned to the Marxist tradition blaming spatial inequalities and the instable geographical configuration of economy and society on the capitalist system. Hence, it has a definite leftist orientation. Beyond its innovative attitude to many issues, however, this approach has proved not dissimilar to previous ones in its relation to orientation and factual knowledge. Apparently, the uneven development concept also has strong ideas that provide substantiation to certain political objectives, thus, to produce and mediate orientation knowledge. In this endeavor it has much too easily made or adopted oversimplifications, which in fact hinder a better understanding of the complex issue of spatial inequalities, but which serve well as a means of providing ammunition for those criticizing capitalism. In other words, although the uneven development concept indeed opened a new phase in the spatial disparity discourse, this has remained as much politically influenced and targeted as it was before, from the very beginning (Fig. 9.1).