

# 7

## Social Protection

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### 7.1 Introduction

Social protection systems have many objectives, including improving well-being, reducing inequality and mitigating social and political conflicts. However, despite those common objectives, social protection models in industrialized countries are relatively diverse. To characterize the diversity of social protection models, Esping-Andersen (1990) proposed a typology based on three criteria: (i) the capacity for the decommodification of social rights, capturing the degree to which people can protect their livelihoods without reliance on the market, (ii) the impact of redistribution on social stratification (status or class inequality) and its contribution to the reproduction of the existing institutional context, and (iii) the contribution of the state, market and family to the financing of social protection. Based on an analysis of social protection systems in 18 industrialized countries, Esping-Andersen identified three welfare

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state regimes: (i) the *liberal* model (Australia, Canada, Ireland, New Zealand, the United Kingdom and the United States), characterized by minimal public protection through means-tested assistance and extended private insurance schemes, (ii) the Social Democratic model (Austria, Belgium, Denmark, the Netherlands, Norway and Sweden), characterized by a high degree of decommodification and universal benefits, and (iii) the Conservative model (Finland, France, Germany, Italy, Japan, and Switzerland), characterized by a moderate degree of decommodification, and by benefits related to occupational status. That typology is difficult to apply to developing countries, since social protection expenditure is very limited and many social, economic and cultural factors impede the introduction of extended public protection.

Throughout the 1980s and 1990s, the failure of structural adjustment programmes to promote economic growth and poverty reduction resulted in increased interest in social protection. The East Asian crisis, globalization and rapid economic changes have also increased the demand for social protection (Rodrik 1997; Gough 2001; Holzmann et al. 2003).<sup>1</sup> Under the influence of international organizations such as the ILO and the World Bank, a consensus has emerged on the need to define protection mechanisms that help people to manage social risks (Barrientos and Hulme 2008). Several social programmes have recently been introduced in developing countries. Those programmes are often unique and innovative since they are designed to take into account the specific sociocultural characteristics of developing countries. For example, *Oportunidades* in Mexico, and *Bolsa Familia* in Brazil, are designed to target poverty by providing cash benefits to poor families in exchange for regular school attendance or vaccinations. In India, the *National rural employment guarantee scheme* aims to promote livelihood security by giving at least 100 days of guaranteed wage employment to every household in rural areas whose adult members volunteer to carry out unskilled

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<sup>1</sup> The effect of globalization is ambiguous. Two conflicting hypotheses have been proposed in the literature (Garrett 2001). The efficiency hypothesis posits that as a result of globalization, governments are subject to the pressure of efficiency and competitiveness, which may undermine interventionism and the welfare state (Evans 1997; Mishra 1999). The compensation hypothesis, however, argues that, by increasing inequality and social insecurity, globalization leads governments to expand the public economy in order to compensate the losers of globalization (Rodrick 1997; Quinn 1997).

manual work. In the Philippines, the *PhilHealth* insurance programme, created in 1995, has been extended to cover informal sector workers via organised groups such as cooperatives.

The sustained expansion of public social protection schemes in developing countries raises several questions. To what extent do recent trends in social protection in developing countries converge? What role, if any, have private social protection schemes played in that convergence? Is there a specific model of social protection for emerging economies? In order to answer those questions, it becomes essential to typify social protection systems in developing economies. Following the seminal work of Esping-Andersen, the present study aims to identify social protection patterns in developing countries by using multidimensional statistical methods such as principal component analysis (PCA) and cluster analysis. The chapter is organized as follows. The first section provides a survey of the extensions of Esping-Andersen's analysis and discusses its applicability to the context of developing countries, the second section presents the data and the statistical methodology, and finally, the third section presents the classification, and discusses the results.

## 7.2 The Diversity of Social Protection Models: A Review

Very little attention has been paid to the diversity of welfare regimes in less developed countries, perhaps because of what are often considered as the uniformizing effects induced by the globalization process. As noted by Rudra: "... since developing countries face similar economic challenges (e.g., demand for capital, large pools of surplus labour), they are expected to converge on neoliberal welfare policies for the purposes of attracting capital and promoting exports" (Rudra 2008: 78). Several empirical investigations have found a negative correlation between the degree of globalization and government spending in developing countries (Kaufman and Segura-Ubiergo 2001; Rudra 2002; Wibbels 2006). For instance, Rudra notes that "... from 1972 to 1995, globalization increased in both developed and developing countries, yet trends in government spending for social welfare diverged during this period: spending rose in

rich countries and slightly declined in less-developed countries” (Rudra 2002: 416). However, by focusing only on social spending, those studies overlook the underlying institutional features of social policies, despite the fact that the institutional framework of social policy is absolutely crucial to any comparative analysis of welfare states across countries.

In their study of seven developing countries (Cambodia, Colombia, Mali, Mexico, Philippines, South Africa and Tunisia), Destremau and Lautier (2006) identify three types of social protection: (i) the Bismarckian type (Colombia, Mexico and Tunisia), which involves extended coverage; (ii) the embryonic type (Mali and Philippines) includes countries in which social protection has remained low because its extension has been blocked; and (iii) the Beveridgean type (Cambodia and South Africa), which mainly refers to systems with degraded public services and a number of very disparate private insurance schemes. In the same perspective, Niño-Zarazúa et al. (2012), who examine the recent extension of social protection in sub-Saharan Africa, identify two models. The first one concerns middle income countries (MIC model), mainly in Southern Africa, and relies on age-based income transfers (social pensions, child support grants, etc.); the second model characterizes low income countries (LIC model) in Eastern, Central and West Africa. Although more heterogeneous than the first group, the second model describes social assistance programmes implemented in the last five years and designed to fight against poverty. Focusing on child benefits, Esser et al. (2009) propose a more targeted typology, which identifies regularities in sub-Saharan African and Latin American countries. In the African context, child benefits consist of Bismarckian programmes (linked to employment) inherited from the colonial period whereas, in Latin American countries, child benefits tend to be more means-tested and determined by school attendance targets.

Those studies tend to be essentially qualitative in nature. Moreover, as their predominant focus concerns the institutional characteristics of public social protection programmes, they overlook the plurality of social protection actors in developing countries (households, communities, markets and NGOs). It is important, however, to adopt a broader definition of social protection, one that can account for social, economic and cultural specificities. Esping-Andersen’s framework provides a useful starting

point, particularly in view of the many developments it has given rise to.<sup>2</sup> Several studies have been able to justify the existence of other welfare regimes that could best describe Southern European countries (Leibfried 1992; Ferreira 1996; Bonoli 1997), Oceanian countries (Castles and Mitchell 1991) or transition countries (Fenger and Menno 2007). Other studies have focused on the specificities of East Asian social protection systems. Authors such as Ku (1997), Kwon (1999) and Esping-Andersen (1997) have suggested that there are similarities between the three welfare systems identified by Esping-Andersen (1990) and the institutional characteristics of social protection schemes in Hong Kong, Japan, South Korea and Taiwan.

For instance, Ku (1997) shows that the Taiwanese system of social protection shares common characteristics with the Conservative regime. Similarly, Esping-Andersen (1997) argues that the Japanese welfare model stands at the crossroads of the *liberal* and Conservative regimes. Holliday (2000) and Lee and Ku (2007) approach the question from a different angle, seeking to determine whether the institutional characteristics and social protection trajectories of East Asian countries provide evidence of a fourth regime. Holliday (2000) argues that East Asian countries can be grouped into a productivist welfare regime. The two central features of that regime are "... a growth-oriented state and subordination of all aspects of state policy, including social policy, to economic/industrial objectives" (Holliday 2000, 709). Following Holliday, Gough (2001) refers to a Developmental model, suggesting that East Asian states always define economic development as their primary goal, with social protection standing as one of the key instruments for achieving that goal.<sup>3</sup>

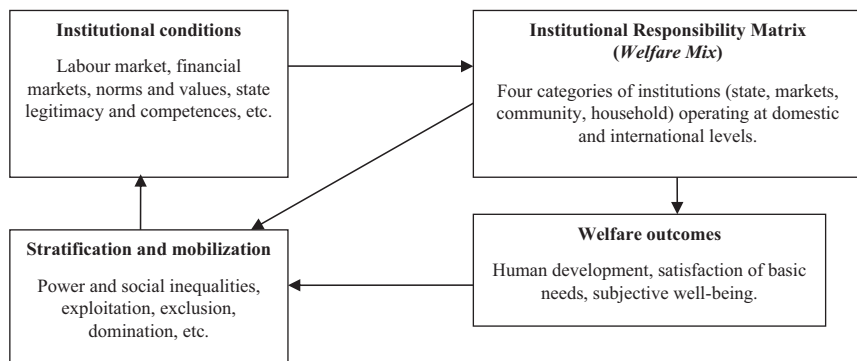
Although criticisms have been levelled against Esping-Andersen's analysis,<sup>4</sup> it is, nonetheless, fundamentally institution-based, and provides a useful model for analysing social protection regularities across developing countries. However, taking into account the social, cultural and economic characteristics of developing countries requires some adjustment

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<sup>2</sup> See the survey by Bamba (2007).

<sup>3</sup> The concept of the developmental model was initially proposed by Johnson (1982) to describe the Japanese model.

<sup>4</sup> See Kasza (2002).



**Fig. 7.1** Theoretical framework for comparing social protection models. *Source:* Wood and Gough (2006)

to the initial framework. Rudra (2007, 2008) explores the possibility of distinct welfare regimes in developing countries by referring to two ideal types of welfare states: (i) Protective welfare states, in which government efforts focus on decommodification; and (ii) Productive welfare states that prioritize commodification. An empirical cluster analysis confirms the validity of those two categories, but also identifies a third group that includes what Rudra calls “weak dual regimes”, combining elements of the two other regimes.<sup>5</sup> The study by Wood and Gough (2006) is also an extension of Esping-Andersen’s analysis. The starting point of their conceptual framework (Fig. 7.1) is based explicitly on the institutional characteristics of countries; namely, market characteristics, state legitimacy, social integration, norms and values and position in the global system. Based on those institutional characteristics, Wood and Gough (2006) define an institutional responsibility matrix (*welfare mix*), following Gough (2001). The matrix describes “... the institutional landscape within which people have to pursue their livelihoods and well-being objectives, referring to the role of government, community, private sector market activity and the household in mitigating insecurity” (Wood and Gough 2006: 1701). The authors distinguish between four categories of

<sup>5</sup>The productive regime is found in countries such as Chile, Costa Rica, Korea, Malaysia, Singapore and Thailand. The protective regime is associated with Bolivia, Egypt, India, Morocco and Tunisia. The dual regimes concern four Latin American countries (Argentina, Brazil, Mexico, and Uruguay).

institutions (state, market, community and household) at domestic and international levels. That institutional structure produces *welfare outcomes* broadly defined in terms of human development, satisfaction of basic needs and subjective well-being. The last feature of their framework is the stratification system, and the patterns of political mobilization. The stratification system refers to power and social inequalities, and characterizes the degree of mobilization of different social groups. Although the degrees of stratification and mobilization tend to reproduce institutional conditions, they can also destabilize them. The stratification system is also influenced by the welfare mix and welfare outcomes. Thus, social stratification and political mobilization are both cause and consequence of the other factors.

On the basis of that institutional framework, Wood and Gough (2006) perform a simple cluster analysis on several dimensions of the welfare mix and welfare outcomes, using a sample of 56 countries. To describe the welfare mix, two variables are considered: (i) public spending on health and education as a share of GDP, and (ii) the sum of international inflows of aid and remittances as a share of GNP. The Human Development Index (HDI) was used as a proxy of welfare outcomes. Three meta-regimes are identified. First, *welfare state* regimes include the three traditional welfare models identified by Esping-Andersen (Social democratic, Conservative and *liberal*), and an *emerging productivist welfare state* regime for countries such as Korea and Taiwan. Second, *informal security* regimes (Latin America, South Asia and East Asia) describe systems in which (i) people rely on community and family relations to ensure their social security and (ii) formal public social protection has recently emerged. In that meta-regime, Wood and Gough (2006) identified a *liberal-informal* regime (Latin America) and a productivist regime (East Asia). *Insecurity* regimes (sub-Saharan Africa, Afghanistan, and Gaza) are characterized by institutional arrangements that generate high social insecurity and prevent the emergence of effective informal protection mechanisms.

The value of Wood and Gough's analysis is that it takes into account the diversity of social protection actors. In particular, their study highlights the role of the community and households, whereas Esping-Andersen's analysis focused mainly on the state and the market.

The theoretical framework developed by Wood and Gough is clearly adapted to the context of developing countries. However, their empirical analysis is restrictive in three respects. First, their sample excludes industrialized countries. Industrialized countries need to be included, in order to determine whether the social protection systems in developing countries converge with the three canonical welfare state regimes defined by Esping-Andersen. Second, that analysis does not take into account the respective contributions of private and public protection: in other words, it overlooks the degree of decommodification of social rights that is so crucial to Esping-Andersen's analysis. Third, it is more useful to develop a typology of social systems by working out welfare mix variables rather than outcome variables, for the simple reason that the former variables describe the institutional structure of social protection. Outcome variables should be used to characterize *ex-post* the identified groups. This chapter addresses some of the limitations of previous studies, focusing especially on those three weaknesses.

### 7.3 Measuring Social Protection

Six quantitative variables are used to carry out the statistical analysis.<sup>6</sup> The first, public social protection and health expenditure as a percentage of GDP (SOC\_EXP), and the second, Social contributions as a percentage of GDP (CONTRIB), both provide information about the level of public social protection. The third is the Ratio between public and private health expenditure (RATIO\_EXP), which is used as a proxy for the decommodification of social protection. The fourth variable is the Mean age of public social security programmes (MEAN\_AGE), which is calculated by using the ILO Social Security Database. For each country, the date of creation of the first scheme for eight risks (old age, sickness, maternity, invalidity, survivors' benefits, family allowance, work injury, unemployment) is used to identify the age of the first programme, and then a simple average measuring the mean age of social security schemes is calculated. The fifth variable is the total number of

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<sup>6</sup>The sources are presented in Table 7.5 in the Appendix.



programmes (NB\_PROG) for all those branches. Finally, as in Wood and Gough (2006), the share of remittances in GDP (REMIT) is used to measure the degree of informal social protection. In order to describe the groups of countries identified in the cluster analysis, we use three additional variables, which are not used to perform either principal component analysis or k-means cluster analysis. The first two characterization variables are the Gini index (GINI) and the human development index (HDI), which measure welfare outcomes. The third characterization variable is GDP per capita (GDPH).

Although 2005 has been used as the reference year, the closest available value was retained when data were not available for that year, a strategy justified by the fact that we mainly use relatively time-invariant structural variables. Nonetheless, some values were still missing. Since the main purpose of the present study was to construct a typology of social protection models based on the largest possible sample of countries, including industrialized, transition, emerging and less developed countries, the treatment of missing data is an important issue. For the SOC\_EXP variable, we used data on public health expenditure as a percentage of GDP (from World Bank World Development Indicators). More precisely, when data were missing for the SOC\_EXP variable, we assigned the values of public health expenditure (as a percentage of GDP) multiplied by the mean ratio of SOC\_EXP to public health expenditure, in order to preserve the same scale and to allow for comparability.

The initial sample of 154 countries was reduced by eliminating the countries for which less than 50% of the variables were known. We then controlled for the representativeness of the remaining sample.<sup>7</sup> Our final working sample is made up of 143 countries.<sup>8</sup> The possible impact of the remaining missing data on statistical results was neutralized by using the corresponding mean values. The data summary statistics and simple correlations between the considered variables are shown in Tables 7.6 and 7.7 in the Appendix.

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<sup>7</sup> It should be noted that complete information is available for 54.5% of the countries, with only 23.8% of them having a single missing variable.

<sup>8</sup> The excluded countries are Angola, Eritrea, Iraq, Kuwait, Liberia, Myanmar, North Korea, Puerto Rico, Somalia, the Virgin Islands and Zambia.

## 7.4 Models of Social Protection

### 7.4.1 Principal Component Analysis

A PCA of the six selected active variables was performed, with three categorical variables, describing the geographical location, the HDI level and the socioeconomic situation of each country, being included as supplementary variables in the analysis.<sup>9</sup> To support the PCA results, 25 bootstrap replications of the initial sample were used to provide confidence intervals for the coordinates of projected active variables. That bootstrap procedure shows that the position of the active variables on the first factorial plan is stable, thus confirming the robustness of the PCA results. Table 7.1 shows the PCA eigenvalues, as well as correlations between active variables and each factor. Figure 7.2 shows the projections of active variables on the first factorial plan, and Fig. 7.3 shows the projections of active individuals on the same plan.

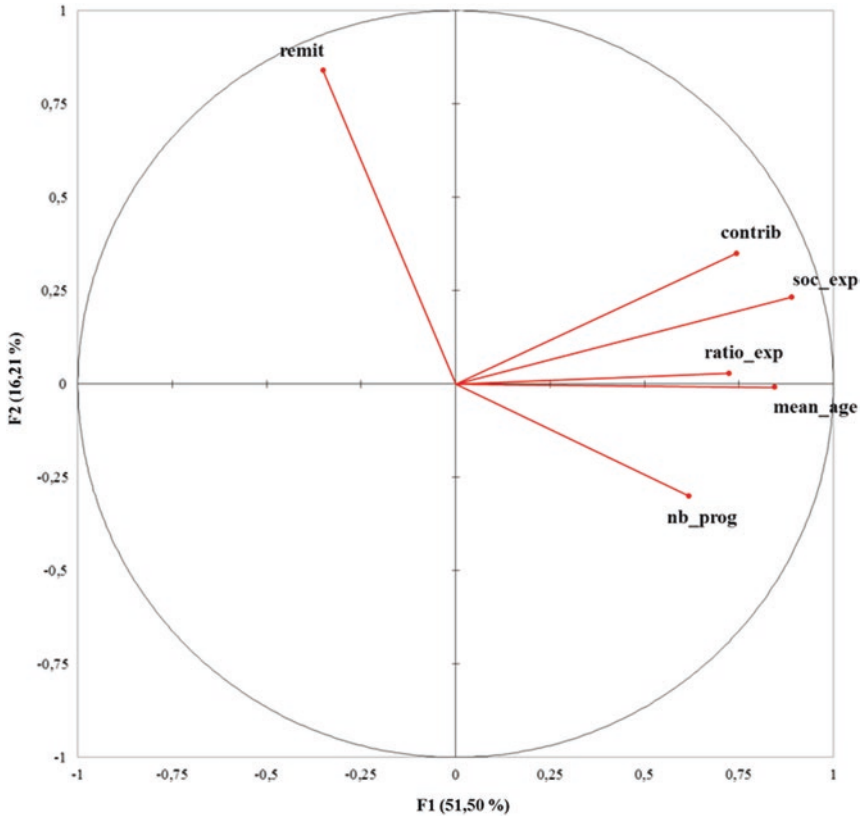
The number of components to be retained depends on (i) the proportion of total variance explained by each component, (ii) the absolute variance explained by each component (the eigenvalue of each component retained should exceed 1), and (iii) the ability of each component to be interpreted meaningfully. Based on the PCA results, two principal components were extracted, accounting for approximately 68% of the

**Table 7.1** PCA eigenvalues and active variable-axis correlations

	PC1	PC2	PC3	PC4
Eigenvalues	3.09	0.97	0.79	0.60
% of variance	51.5	16.2	13.2	10.0
Cumulative %	51.5	67.7	80.9	90.9
Remittances (% of GDP)	-0.35	0.84	0.37	0.17
Mean age of programmes (years)	0.85	-0.01	0.21	-0.17
Number of programmes	0.62	-0.30	0.68	0.09
Social contributions (% of GDP)	0.74	0.35	-0.23	-0.42
Social protection expenditure (% of GDP)	0.89	0.23	-0.08	0.04
Ratio of public to private health expenditure	0.72	0.03	-0.30	0.60

*Data sources:* Author's calculations on data collected from IMF, World Bank, WDI, ILO Social Security Database and UNDP; for details, see Table 7.5

<sup>9</sup> It should be noted that those variables do not affect the construction of principal components.



**Fig. 7.2** Projection of active variables on the first factorial plan. Data source: Author's calculations. See Table 7.5 for details

total variance. The first component explains 51.5% of total variance. The contributions of variables show that F1 captures mostly positive correlations between `RATIO_EXP`, `SOC_EXP`, `MEAN_AGE`, `NB_PROG` and `CONTRIB`, which suggests that countries with a high level of public social protection are those that have the oldest and most fragmented public schemes. France, for example, has 15 public schemes (for 8 covered risks) with a mean age of 91 years, which represent almost 30% of GDP in 2005 (including health expenditure). At the other end of the spectrum, in Pakistan, social protection and health expenditure as a percentage of GDP is just 0.2%, the mean age is 42 and there are 6 programmes (for 6

covered risks). Therefore, the coordinates of countries on the first component can be interpreted in terms of the decommodification of social protection. Although the second component has an eigenvalue just below 1, it can be extracted, since it explains more than 16% of the total variance and can be interpreted easily. Most of the variance, explained by component F2, comes from the variable that measures the share of workers' remittances in GDP (REMIT), which indicates that F2 captures the degree of informal protection, even if remittances only provide partial information about the extent of informal coping mechanisms.

As shown in Fig. 7.3, many industrialized and transition countries, and several Latin American countries are located on the right-hand side of the first factorial plan. However, the situation of all those countries concerning F1 is not homogeneous. The extreme right hand-side includes Western European countries, while English-speaking, Latin American and Central and Eastern European countries (CEEC) are closer to the origin. The left-hand side only contains developing countries, with a distinct group at the top (low degree of informal protection), and a distinct group at the bottom (high degree of informal protection).

Although PCA can help in suggesting a classification of countries according to the degree of decommodification of social protection, it does not of itself provide any clear indication of the specific composition and characteristics of the different categories. That is why cluster analysis methods have been used to construct the appropriate typology.

## 7.4.2 Four Models of Social Protection

Using the data generated by PCA, a mixed classification method has been used to establish homogeneous and meaningful clusters of countries concerning social protection issues. Our mixed classification procedure is based on hierarchical cluster analysis, with the resulting relevant partitions<sup>10</sup> being consolidated via *k*-means-like iterations aimed at maximizing inter-cluster variance while minimizing intra-cluster variance. As that

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<sup>10</sup> The so-called relevant partition, i.e. the relevant number of clusters, is derived from the analysis of the dendrogram and the analysis of two indicators respectively measuring (i) the improvement of the inter- to intra-cluster variance ratio from one given partition to another and (ii) the impact of *k*-means consolidation on that ratio.

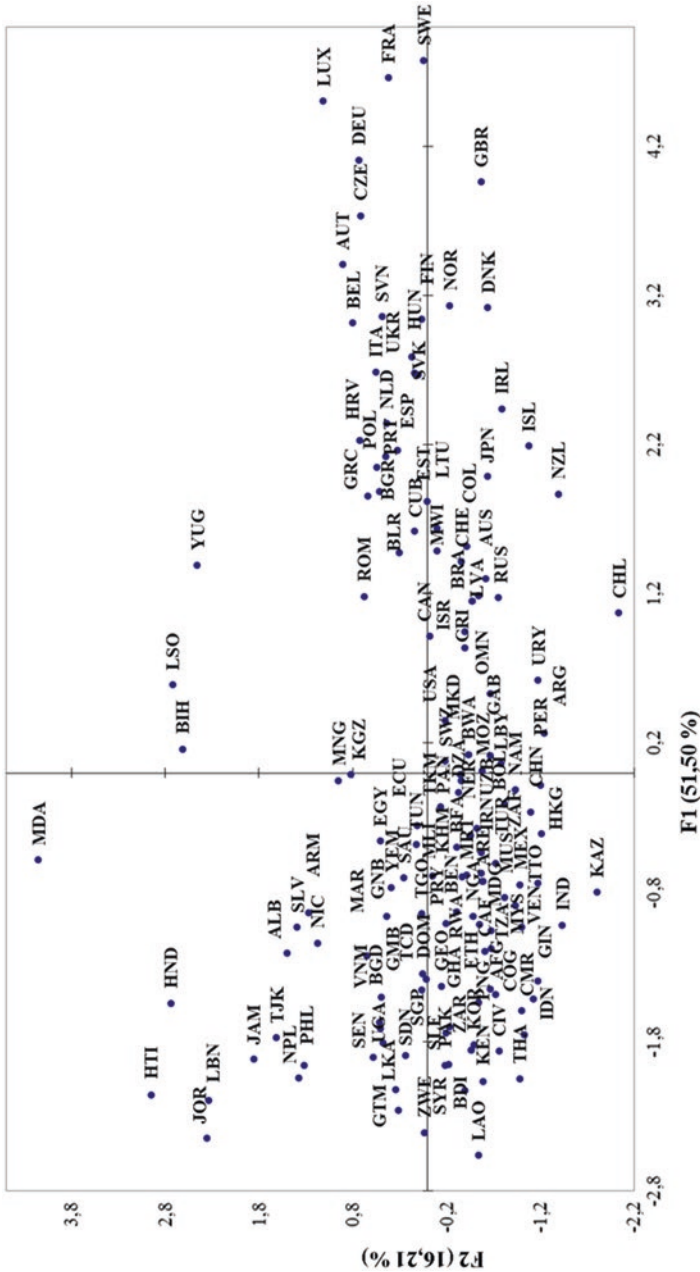


Fig. 7.3 Projection of active individuals on the first factorial plan. Data source: Author's calculations

procedure would tend to force each country into one cluster, we have chosen to set up a supplementary, *idiosyncratic* cluster, to bring together those countries whose position in the initial multidimensional scatter plot was extremely close to the barycentre.<sup>11</sup> The reality of social protection in those countries is somewhat unclear, differing from the social protection system of the clearly classified countries, but also differing from the social protection system of the other countries included in the “indistinct” cluster. Those countries have original institutional arrangements that are both (i) different from the “regularities” established for other countries, and (ii) generally different from one another. In other words, the *idiosyncratic* cluster includes countries where original institutional arrangements are at work, that is, countries that defy classification in clearly established categories. Table 7.2 shows the compared means of the active and supplementary variable by clusters. Table 7.3 shows the frequencies of informative variables concerning the type of country (industrialized, emerging, developing or less developed), the geographical area and the HDI category (low to very high). Table 7.4 lists the countries belonging to each cluster and Fig. 7.4 maps the models in a world atlas.

Countries belonging to the first cluster are characterized by a high degree of decommodification and by an old, institutionalized, public protection system. Inequalities are significantly lower and human development greater than in other categories. In other words, that group has the best welfare outcomes, and is representative of the *decommodified social protection* model. The first cluster mainly includes European countries identified by Esping-Andersen (1990) as the Conservative model (France, Germany, Italy) and the Social Democratic model (Denmark, the Netherlands, Norway, Sweden). However, the six variables taken into account provide no clear basis for distinguishing between those two welfare regimes. Japan also illustrates the *decommodified* model. That result confirms the typologies describing the Japanese welfare state regime as a Conservative regime (Esping-Andersen 1990; Kangas 1994; Korpi and Palme 1998), but is not consistent with the findings of Castles and Mitchell (1993), who classified Japan as a *liberal* model. In fact,

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<sup>11</sup> More exactly, the standardized Euclidean distance between those countries and the barycentre is less than half the median distance.

Table 7.2 Compared means of active and supplementary variables by cluster

	<i>Decommodified</i>	<i>Liberal</i>	<i>Social insecurity</i>	<i>Informal</i>	<i>Idiosyncratic</i>	<i>All</i>
Remittances (% of GDP)	<b>1.30 (1.66)</b>	<b>1.30 (1.53)</b>	3.02 (3.41)	<b>18.63 (4.73)</b>	3.08 (2.81)	4.48 (6.44)
Mean age of programmes (years)	<b>81.00 (12.92)</b>	63.02 (15.66)	<b>43.56 (12.51)</b>	<b>49.18 (15.84)</b>	55.15 (7.43)	59.07 (19.70)
Number of programmes	<b>10.81 (2.24)</b>	<b>12.35 (2.28)</b>	<b>6.26 (1.45)</b>	7.69 (2.50)	8.69 (1.82)	8.99 (3.04)
Social contributions (% of GDP)	<b>11.42 (4.16)</b>	<b>3.14 (3.13)</b>	<b>0.74 (0.99)</b>	4.18 (4.32)	5.00 (1.81)	5.52 (5.38)
Social protection expenditure (% of GDP)	<b>21.81 (4.69)</b>	9.44 (5.13)	<b>4.09 (2.68)</b>	9.12 (5.74)	9.24 (3.65)	10.57 (7.78)
Ratio of public to private health expenditure	<b>3.73 (1.97)</b>	1.38 (1.01)	<b>0.96 (0.95)</b>	<b>1.10 (1.18)</b>	1.56 (0.87)	1.79 (1.68)
GDP per capita (constant 2005 \$—PPP)	<b>24,545 (13,805)</b>	14,750 (11,775)	<b>5631 (10,276)</b>	<b>3838 (2656)</b>	7104 (7933)	11,402 (13,012)
HDI	<b>0.803 (0.11)</b>	<b>0.724 (0.11)</b>	<b>0.475 (0.171)</b>	0.576 (0.12)	0.563 (0.18)	0.617 (0.19)
Gini index	<b>32.84 (7.08)</b>	42.88 (7.61)	41.77 (7.34)	41.30 (10.37)	43.90 (9.18)	40.09 (9.01)

Note: The values that significantly differ (5% level) from those of other clusters (independent samples t-test) are in bold  
Data sources: Author's calculations on data collected from IMF, World Bank, WDI, ILO Social Security Database and UNDP; for details, see Table 7.5

**Table 7.3** Clusters' geographic and economic distribution

	<i>Social</i>					<i>All</i>
	<i>Decommodified</i>	<i>Liberal</i>	<i>insecurity</i>	<i>Informal</i>	<i>Idiosyncratic</i>	
OECD	0.55	0.17	0.00	0.00	0.08	0.17
East Asia and Pacific	0.00	0.09	0.18	0.06	0.08	0.09
Eastern Europe and Central Asia	0.36	0.26	0.05	0.39	0.04	0.20
Latin America and the Caribbean	0.06	0.31	0.07	0.28	0.20	0.15
Middle East and North Africa	0.00	0.04	0.09	0.11	0.24	0.09
Sub-Saharan Africa	0.03	0.09	0.52	0.11	0.36	0.26
South Asia	0.00	0.04	0.09	0.05	0.00	0.04
<i>Total</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Low HDI	0.03	0.00	0.61	0.23	0.36	0.29
Middle HDI	0.03	0.23	0.25	0.53	0.4	0.26
High HDI	0.25	0.54	0.07	0.24	0.16	0.22
Very high HDI	0.69	0.23	0.07	0.00	0.08	0.23
<i>Total</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>
Industrialized countries	0.70	0.39	0.02	0.39	0.08	0.29
Emerging countries <sup>a</sup>	0.24	0.44	0.34	0.17	0.24	0.29
Developing countries	0.03	0.17	0.25	0.22	0.36	0.21
Less developed countries	0.03	0.00	0.39	0.22	0.32	0.21
<i>Total</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>

<sup>a</sup>Emerging countries are those defined as such by at least one of the following institutions: Boston Consulting Group, BNP Paribas, the IMF or Standard and Poor's

*Data sources:* Author's calculations

the Japanese model is likely to be at the intersection of the *liberal* and Conservative models, as noted by Esping-Andersen (1997). Although some transition countries have implemented liberal reforms, social protection systems inherited from the socialist era have remained in place in countries such as the Czech Republic, Hungary, Poland, Romania and Ukraine, thus explaining their proximity to the *decommodified social protection* model.



**Table 7.4** Classification of countries in the different clusters

<b>Cluster 1—Decommodified social protection model (33 countries)</b>				
Austria	<b>Czech Republic</b>	<b>Hungary</b>	Malawi	<b>Slovenia</b>
Belarus	Denmark	Iceland	Netherlands	Spain
Belgium	Estonia	Ireland	Norway	Sweden
<b>Bulgaria</b>	Finland	Italy	<b>Poland</b>	Ukraine
<b>Colombia</b>	France	Japan	Portugal	United Kingdom
<b>Croatia</b>	Germany	Lithuania	<b>Romania</b>	
Cuba	Greece	Luxembourg	Slovak Republic	
<b>Cluster 2—Liberal social protection model (23 countries)</b>				
<b>Argentina</b>	<b>China</b>	Macedonia	<b>Oman</b>	United States
Australia	Hong Kong	Mauritius	<b>Peru</b>	<b>Uruguay</b>
Azerbaijan	<b>India</b>	<b>Mexico</b>	<b>Russia</b>	Uzbekistan
<b>Brazil</b>	Kazakhstan	Namibia	Switzerland	
<b>Chile</b>	Latvia	New Zealand	Trinidad and Tob.	
<b>Cluster 3—Social insecurity model (44 countries)</b>				
Afghanistan	<b>Dominican Rep</b>	<b>Korea, Rep.</b>	Rwanda	Tanzania
Bangladesh	Ethiopia	Lao	<b>Saudi Arabia</b>	<b>Thailand</b>
Burundi	Georgia	Madagascar	Senegal	<b>Turkey</b>
Cameroon	Ghana	Malaysia	Sierra Leone	Uganda
Central African Republic	Guatemala	Mauritania	Singapore	United Arab Emirates
Chad	Guinea	Morocco	<b>South Africa</b>	<b>Venezuela</b>
Congo, Rep.	Guinea-Bissau	Nigeria	Sri Lanka	Vietnam
Congo, Dem. Rep.	<b>Indonesia</b>	<b>Pakistan</b>	Sudan	<b>Zimbabwe</b>
Côte d'Ivoire	Kenya	Papua New Guinea	Syria	
<b>Cluster 4—Informal (Remittance-Based) social protection model (18 countries)</b>				
Albania	Gambia	<b>Jordan</b>	Moldova	Serbia
				Montenegro
Armenia	Haiti	Kyrgyz Republic	Nepal	Tajikistan
Bosnia Herzegovina	Honduras	Lebanon	Nicaragua	
<b>El Salvador</b>	Jamaica	Lesotho	<b>Philippines</b>	
<b>Cluster 5—Idiosyncratic types (25 countries)</b>				
Algeria	Cambodia	Gabon	Mongolia	Swaziland
Benin	Canada	<b>Iran</b>	Mozambique	Togo
<b>Bolivia</b>	Costa Rica	<b>Israel</b>	Niger	<b>Tunisia</b>
Botswana	<b>Ecuador</b>	Libya	Panama	Turkmenistan
Burkina Faso	<b>Egypt</b>	Mali	Paraguay	Yemen

Note: Bold characters refer to emerging countries, defined as such by at least one of the following institutions: Boston Consulting Group, BNP Paribas, IMF or Standard and Poor's

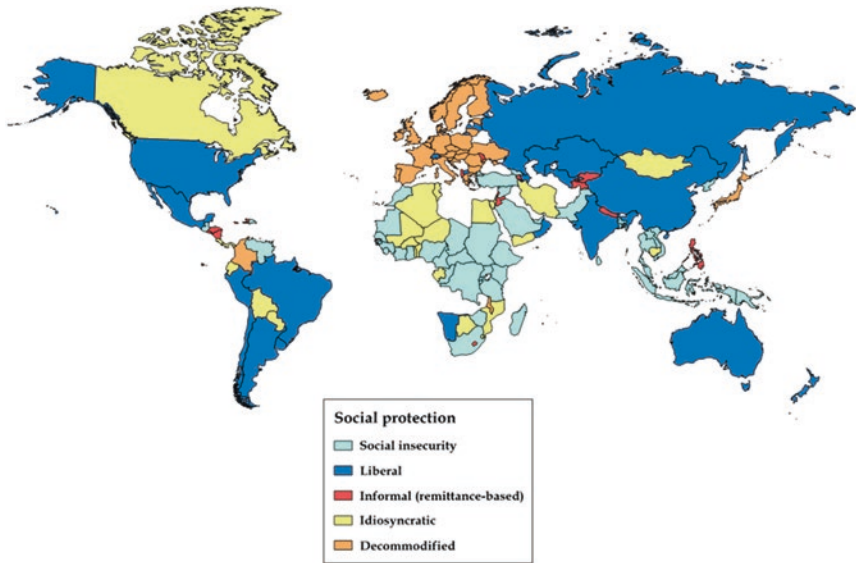


Fig. 7.4 Map of the social protection models

The second group, which refers to institutionalized systems of public social protection with a moderate degree of decommodification of social rights, is representative of the *liberal social protection* model. Human development and GDP per capita are high, but income inequality is greater than in the first group. The second group is heterogeneous, and includes countries in Latin America (31%) and Eastern Europe and Central Asia (26%), but also in Western Europe and North America. Not surprisingly, four Anglo-Saxon developed countries, Australia, New Zealand and the USA, are to be found in that group. The Swiss social protection system is also defined as a *liberal* model, in line with Castles and Mitchell's (1993) typology. The composition of the second cluster confirms the proximity of the *liberal* model and the Latin American model. The privatization of old-age pension and healthcare systems in Chile since the reforms of 1981 has been widely discussed in the literature on Latin America (Mitchell and Ataliba-Barreto 1997; Armada et al. 2001; Mesa-Lago and Muller 2002; Homedes and Ugalde 2005). For instance, old-age pension systems have been completely or partially privatized in most of the Latin

American countries belonging to that group, including Peru (1993), Argentina (1994) and Uruguay (1996).<sup>12</sup>

Another characteristic of the group is that it includes several large emerging countries, such as the BRICs (Brazil, Russia, India and China) and Mexico. Although India has some Beveridgean schemes inherited from English colonial rule, social expenditure is low compared to that of other developing countries (Justino 2006) and has even declined as a percentage of GDP, dropping from 1.6% in 1995 to 0.86% in 2005. Existing programmes cover only a small proportion of the population. For instance, in 2005, nearly 25.1% of the population aged over 65 received an old-age pension (ILO Social Security Database).

The low level of public social protection leads to a moderate level of decommodification, and recent programmes such as the National rural employment guarantee scheme (1995) and the Targeted public distribution system (1997)<sup>13</sup> are assistance schemes that have reinforced the liberal orientation of the system.

In the case of the Russian social protection system, the Soviet legacy remained apparent until the late 1990s. From 2000 onwards, a process of liberalization was introduced, with a view to reforming the social protection system (Clément 2007). The 2001 pension reform, the first step toward liberalization, followed the recommendations of the World Bank and established a three-pillar system combining pay-as-you-go and private schemes. That second group also includes other former Soviet Union countries, such as Azerbaijan, Kazakhstan, Latvia and Uzbekistan.

The third group is the *social insecurity* model. In that model, public protection is residual, and the degree of decommodification extremely low. The level of remittances is also moderate, which supports the idea that informal protection is limited and cannot compensate for the absence of an institutionalized system. The level of human development is, consequently, significantly lower than in the other groups. That group is also

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<sup>12</sup>As noted by Kritzer (2001), there are certain variations. Several countries, including Argentina and Uruguay, have introduced mixed systems that combine pay-as-you-go and private individual accounts, while the systems in Chile and Bolivia have been entirely privatized.

<sup>13</sup>In India, the *public distribution system* is an instrument for ensuring the availability of essential food items such as rice, wheat and sugar at affordable prices. In 1997, the *targeted public distribution system* replaced the old universal public distribution system, and only provides food assistance to the poor.

heterogeneous, although it mainly includes less developed countries, such as sub-Saharan African countries (52%), and the poorest Asian countries (Bangladesh, Cambodia, Laos and Myanmar). However, it also includes a number of emerging countries such as Indonesia, Korea, South Africa, Thailand and Turkey. The presence of several East Asian countries in that group confirms that welfare states are not protective in the sense defined by Rudra (2007, 2008) or, in other words, that they are not designed to meet social and redistributive objectives. Therefore, the group provides evidence of a productivist East Asian regime in which state intervention is determined by economic and industrial objectives, as noted by Holliday (2000). However, the presence of less developed countries in the same cluster shows that the robustness of that productivist model is weak.

By analogy with the classification provided by Wood and Gough (2006), the last-mentioned cluster refers to the *Informal Social Protection* model. As with the previous category, formal public protection is limited. However, the inflows of international remittances show that family or kinship solidarity mitigates vulnerability. The group includes 18 countries with a very high level of external remittances. For instance, remittances as a share of GDP are above 20% in Haiti, Honduras, Lebanon, Moldova and Tajikistan. Although the level of income inequality in the cluster 4 is close to that observed in the cluster 3 (*social insecurity* model), the existence of informal schemes could explain its higher level of human development. This is why this model has also been called *Informal (Remittance-Based) social protection*. That difference concerns countries that are comparable from an economic point of view. Examples include the Philippines and Indonesia, two countries with common economic characteristics and a similar development trajectory. Public social protection expenditure as a percentage of GDP is also extremely low in both countries (less than 2%). That economic proximity explains why they are both classified as “baby tigers”, although the Philippines has a higher level of human development. Although it is impossible to establish any causality on the basis of such a comparison, one plausible explanation of that gap could be the existence of informal social protection mechanisms via international migration and remittances in the Philippines. The same observation applies when comparing Jordan and Lebanon (*informal social protection*) to Syria (*social insecurity*).

## 7.5 Conclusion

The present chapter, which uses Esping-Andersen's framework as a starting point, is a contribution to the analysis of social protection diversity in developing countries. However, as social protection models in developing economies are characterized by a plurality of social protection actors and the existence of a strong informal system, any relevant classification of social protection models requires the role of the government, community, market and family in promoting social security, the *welfare mix* of Wood and Gough (2006), to be jointly taken into account.

The empirical analysis carried out in the present study applies multi-dimensional statistical techniques to variables relating to the configuration of the *welfare mix*. However, unlike previous studies, a large sample of 143 countries (including industrialized countries, transition countries and most developing countries) was used. The PCA has been used to identify the degree of decommodification and the extent of informal social protection as the two key criteria for characterizing social protection. On that basis, we carried out a cluster analysis that produced a four-group typology including a *decommodified* model, a *liberal* model, a *social insecurity* model and a model of *informal social protection*.

The three main findings of this chapter can now be stated. First, most Latin American countries show clear similarities with the Anglo-American *liberal* model. The privatization of healthcare and old-age pension systems in Chile in the 1980s was to generate, in the 1990s, a second wave of privatization in other Latin American countries. Second, the results provide little evidence of a specific East Asian model. Although Indonesia, Korea, Singapore, Thailand, and Vietnam belong to the same group (i.e., *social insecurity* model), they share characteristics with less developed countries, such as sub-Saharan African countries. Third, the social protection situation of transition countries is somewhat diverse. Unlike many Eastern European countries, whose social protection systems are characterized by a significant degree of decommodification, Russia liberalized its system during the transition process, following the recommendations of the World Bank.

Even if the present study does not, it is true, allow any one social protection model to be uniformly valid for all emerging countries to be identified it is, nonetheless, possible to pinpoint a limited number of welfare regimes for those countries. Although Latin American countries and the BRICs

have many points in common with the *liberal* model, East Asian countries and South Africa are more appropriately classified within the *social insecurity* model. Although all emerging countries do have one feature in common, the low degree of decommodification of social rights, it should be noted that many of those countries have recently developed ambitious public schemes: the Child Support Grant in South Africa, the Oportunidades and Bolsa Familia programmes in Mexico and Brazil, the Minimum Living Standards Scheme in China, the National Rural Employment Guarantee Scheme in India, and the PhilHealth programme in the Philippines. These new programmes indicate that social protection is becoming an increasingly important concern for developing economies, suggesting that redistribution issues make increasing sense for governments as soon as the sustainability of economic growth is at stake. Many of those programmes, like the Oportunidades and Bolsa Familia programmes, aimed at poor families with children, or the PhilHealth programme designed to support informal workers, are schemes designed to target specific populations (the poor, rural workers, informal workers, etc.). This would suggest that there is a tendency for emerging countries to converge towards the *liberal* model, according their preference to selective rather than universal protection.

## Appendix

**Table 7.5** Statistical sources

Code	Label	Source
SOC_EXP	Public social protection and health expenditure (% of GDP)	IMF
CONTRIB	Social contributions (% of GDP)	World Bank, WDI
MEAN_AGE	Mean age of public social protection	ILO Social Security Database
NB_PROG	Total number of public social protection programmes	ILO Social Security Database
RATIO_EXP	Commodification ratio (ratio of public to private health expenditure)	World Bank, WDI
REMIT	Workers' remittances and compensation of employees (% of GDP)	World Bank, WDI
GINI	Gini index	World Bank, WDI
HDI	Human Development Index	UNDP
GDPH	GDP per capita, PPP (constant 2005 international \$)	World Bank, WDI

Table 7.6 Simple correlations between active variables

	Remittances (% of GDP)	Mean age of programmes (years)	Number of programmes	Social contributions (% of GDP)	Social protection expenditure (% of GDP)	Ratio of public to private health expenditure
Remittances (% of GDP)	<b>1.000</b>					
Mean age of programmes (years)	<b>-0.240</b>	<b>1.000</b>				
Number of programmes	<b>-0.206</b>	<b>0.544</b>	<b>1.000</b>			
Social contributions (% of GDP)	<b>-0.126</b>	<b>0.553</b>	<b>0.231</b>	<b>1.000</b>		
Social protection expenditure (% of GDP)	<b>-0.157</b>	<b>0.684</b>	<b>0.417</b>	<b>0.683</b>	<b>1.000</b>	
Ratio of public to private health expenditure	<b>-0.234</b>	<b>0.452</b>	<b>0.296</b>	<b>0.402</b>	<b>0.638</b>	<b>1.000</b>

Note: Bold values indicate a significant correlation at the 5% level

Data sources: Author's calculations on data collected from IMF, World Bank, WDI, ILO Social Security Database and UNDP; for details, see Table 7.5





Table 7.7 (continued)

	All (N = 143)	Industrialized countries	Emerging countries <sup>a</sup>	Developing countries	Less developed countries
Remittances (% of GDP)	4.48 (6.44)	4.48 (7.56)	3.53 (4.69)	5.11 (6.77)	5.33 (6.82)
Mean age of programmes (years)	59.07 (19.70)	74.04 (18.67)	58.09 (17.80)	48.90 (8.07)	41.76 (12.20)
Number of programmes	8.99 (3.04)	11.08 (2.29)	9.21 (3.04)	7.22 (2.50)	6.28 (1.32)
Social contributions (% of GDP)	5.52 (5.38)	8.84 (5.11)	4.75 (5.07)	1.95 (2.39)	0.41 (0.45)
Social protection expenditure (% of GDP)	10.57 (7.78)	17.65 (7.74)	9.44 (6.47)	6.86 (3.92)	5.85 (5.15)
Public to private health expenditure	1.79 (1.68)	2.62 (1.86)	1.58 (1.62)	1.70 (1.56)	1.01 (1.06)

<sup>a</sup>Emerging countries are those defined as such by at least one of the following institutions: Boston Consulting Group, BNP Paribas, IMF or Standard and Poor's  
 Data sources: Author's calculations; for details, see Table 7.5

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