6

Industry and Industrial Policies in the European Union

6.1 Current and Future Framework for Industrial Development in Europe

In the past three decades in Europe, not just the advanced economies, but also the emerging economies, have been developed under the influence of increasingly faster, and therefore often disturbing, effects of the new information and communication technologies, and, no less, of the findings in other areas, such as new sources of energy and new materials.

All these developments bring deep changes in the architecture and structure—from concept to construction, institutions, functionality, organisation, dimensions—of the existing companies and industrial platforms. They also bring changes in trade mechanisms and policies.

In addition to this pressure, in parallel, the issues of resources prone to depletion, climate change and the protection of the environment, accelerated migration rates—including migration of brains (brain drain)—the flight of highly trained engineering and technical professionals, the ageing of population and so on all require a new approach to ensure that the economy becomes smart, sustainable and attractive in order to retain a young and well-trained workforce, as support, to narrow the existing

L. Chivu et al., *Deindustrialization and Reindustrialization in Romania*,
DOI 10.1007/978-3-319-65753-0_6

productivity gap and avoid the creation of new one and to maintain economic and social cohesion at the national and European level.

The rapid changes in the industrial landscape in Europe and in every EU member state are taking place in a climate of distrust, uncertainty in the markets, difficulty accessing finance and skill shortage—all of which make an active and constructive partnership between the EU and its member states more necessary than ever.

In general terms, the new industrial revolution (NIR) that is often referred to in academic and political speeches and, in practice, marks its sharp presence every day, must be understood as follows: energy should increasingly come from renewable sources, and new manufacturing methods should be designed as well as innovative materials and intelligent communication systems.

With this in mind, the priorities of Europe 2020 Strategy are, inevitably, linked to intelligent, sustainable, efficient and competitive socially inclusive economic growth.

For the purposes of European 2020 Strategy, the EC proposed five objectives and concrete targets: improving the employment rate, increasing investment in research and development, implementing 20/20/20 targets for climatic changes and energy, keeping students in school till graduation and reducing the number of the citizens at risk of poverty.

Progress in achieving the objectives is sustained by initiatives aiming to address issues like capitalising on the information and communication technology (ICT), youth in motion, innovation, an integrated industrial policy for the globalisation era, employment based on new skills, fighting poverty through social and territorial cohesion and the efficient use of resources.

There are voices saying that Europe needs an industrial policy to function in an integrated context suitable to the globalisation era. The need for this is explained by the fact that one out of four jobs in the private sector of the EU is in the manufacturing industry; and at least one other job out of four is in related services that depend on industry in the upstream or downstream chain.

In other words, 50% of the jobs in the private sector are dependent on industry, and 80% of the private sector research activities sustains, as an innovative engine the industrial development further and provides solutions for achieving industrial competitiveness.

Industry plays the most important role in the new development model of the EU and in the health and viability of the EU's economy. The recent financial crisis brought to the fore the critical importance of the competitive and diversified value-added chains of industrial processing, for which information and communication technologies and skills are the foundation of international competitiveness.

With a continuously stronger competition for sources of energy and raw materials, it is necessary to develop an industry based on low carbon emissions and better use of resources, supported by new horizontal and vertical policies.

These policies must provide a positive impact on costs, prices and competitiveness through innovation and sectorial standardisation. Also, a careful analysis must be carried out on policies governing energy, transportation, the environment, social issues, competition and consumer protection to see what effects these have on competitiveness.

There are proposals using a differentiated approach and transitional strategies adapted to the specifics of each sector for the promotion of industrial excellence and coordination with the EU policies (where national sectors or industries with a lower interaction with other sectors or with the rest of the world become less relevant), These proposal must consider the entire value chain of production and supply, from raw materials accession up to post-sales services and recycling reusable materials.

Improving the conditions in which industry operates, will require, first of all, an intelligent basis for all levels of government intervention in political domains that have the potential to influence industrial competitiveness.

Achieving such a policy framework will require a thorough analysis of the impact these policies will have on competitiveness (internal market, access to financial markets, climate change), investment, costs, prices, innovation and consumer satisfaction, with the due development of public roadmaps to ensure transparency and with opinion polling of enterprises and of the parties interested in drafting legislative initiatives and designing policies.

The ex-post assessment of the effects of legislation on competitiveness is necessary as well; regular evaluations must become an integral part of *smart regulations*, enabling the creation of reactive policies based on evidence and transparency, in order to identify opportunities to improve quality of the EU laws and simplify the dispensation of justice.

In addition to the strengthening of the single market, by way of observing industrial property rights, *through non-discriminatory and equitable competition policy for all EU member states* and through standardisation, a new industrial innovation policy is necessary.

The EC proposed that investment in innovation should focus on six strategic areas: Key Enabling; Technologies; Essential Products; Constructions and Raw Materials, Clean Vehicles and Smart Grids, with the commitment not to encourage new investment in products that are marketable.

Innovation, alongside with more profitable market conditions and access to financial and human capital must be one of the pillars of a consolidated industrial policy.

The decisive factor in innovation will always be research and development, materialised into industrial advantages. The drivers of innovation for the industrial revolution shall be the new technologies emerging in energy, information, and production (intelligent materials, 3D printing, smart grids, bioplastic materials, creative industries, medical technologies and devices), with the priority lines of action focused on—

- advanced technologies for organic production—the basic component of the NIR (3D printing, recycling of reusable materials, energy saving). For this purpose, a proposal was made to set up a working group to coordinate national policies regarding advanced technologies (guidance, coordination, dissemination, commercialization, partnerships, supply and demand for innovative technologies, public procurement in innovation, partnerships for low carbon emissions, trans-border cooperation for promotion and use of advanced technologies);
- key enabling technologies (micro-electronics, nano-electronics, advanced materials, industrial biotechnology, photonics, nano-technology and advanced manufacturing methods);
- bio-based products (bio-plastic materials, biodegradable lubricants, bio- solvents, chemical food, bio-fuels, bio-refineries);
- sustainability in industry, construction, enduring raw materials (environmental friendly design, recycling reusable materials, closed-circuit economy, urban mining for wastes);

- clean vehicles and boats, and a trans-European transport network (interoperability, connectivity, infrastructures for alternative fuels, reloading, refueling networks);
- smart grids (integration of energy from renewable sources into power grids, smart metering systems, interoperability of smart grids at the trans-border level through compatible standards).

With special stress placed on innovation, it is important to support pilot projects demonstrating the advantages of developing marketable technologies—to create a market for innovative goods and services; to stop the widening gap between national performance in research and development among the member countries; to use the ICT for purposes of industrial competitiveness; to optimise the use of resources and innovation; *to stop the further drain of ICT experts to other markets; and to increase the number of graduates in the sciences, technology, engineering and mathematics and recruit them for fast-growing industries* (environmental protection, energy).

These are only some of the lines of action for the new innovation policy.

Another set of drivers are those devoted to the upgrading of industry and to sectoral configuration of policies.

In principal, these drivers have to do with the transition to a low-carbon emission economy, capable of using resources and energy in an efficient way, through structural changes of the industrial, energy and transport systems; investment in energy efficiency; and incentives for the companies that undertake such measures. They also have to do with the need for research and development in both the private and the public sector, and the need to stop the relocation of industries outside the EU.

And, finally, the sectoral dimension requires an approach focused on issues like climate change, health and safety (and the development of environmentally friendly technologies designed to improve them) and the important value chains (chemistry, transport equipment, agro-food industries, services to companies), tailored to the specifics of the high-energy-consuming sectors (with a broad understanding of innovation that considers not only technology, but also new models of doing and

organising business). The approach should be focused, also, on the industrial side of other policies that may influence competitiveness (such as improving the business environment, streamlining public administration, enhancing the capacity for innovation, energy efficiency); on climate change, energy, demographic ageing, competencies/knowledge, interaction and coordination of policies that affect competitiveness (ensuring that the new policy proposals have enhanced competitiveness at their core).

To follow such lines of action, which will be the backbone of the new industrial policy, the internal market needs to function flawlessly, as well as valorise the opportunities offered by the emerging economies.

The current trend of automation and data exchange in manufacturing technologies, generically called "Industry 4.0", provides the background upon which environmental accounting tools could be enhanced, incorporating, at the company level or at the level of the national economy, more accurate and higher-quality data on the costs of environmental impact. As shown by Burritt and Christ, at European or global levels, the networking of computer systems channelling financial information and data to a common base, such as a cloud, providing a platform for potential inquiries by managers, external stakeholders and larger or smaller companies, across multiple countries, could make a major contribution to making more efficient use of resources and, long-term, securing the prerequisites for smart economic growth—that is, growth that is environmentally and socially sustainable (Burrit and Christ 2016).

At the same time, turning the new strategic approaches into reality will not be possible without equal and non-discriminatory access to finance both for strategic major investors and the small and medium-sized enterprises (SMEs). More public funds will be needed, but also an easier access to the capital market.

In other words, the state, through its *public authorities,* must take action towards creating adequate market conditions and offer solutions to smooth out market-related deficiencies, even if the companies themselves are ultimately responsible for their own success or failure in the market.

Using these ideas, EU industry should be able to increase its share of contribution to the EU's GDP from a current 15.5% to 20% in 2020; and the investment in equipment should grow to 9% of the GDP in 2020.

6.2 European Commission's New Industrial Policy: Towards an Industrial Renaissance

Statement of facts: The role played by industry in the EU exceeds by far that of the manufacturing industry. Industry's role starts with the energy sector and raw materials; and it goes all the way to business (logistic) services, consumer services (including post-sale services for durable goods) and tourism. Industry accounts for 75% of the EU's exports (the trade balance for manufactured goods has a surplus of 365 bn. euro), which demonstrates that its importance is much greater than would be expected from its share in the GDP (15.5% in 2015). Approximately 80% of the R&D expenditures in the private sector come from industry.

One-quarter of the jobs for highly skilled personnel in the private sector are in industry. Every new job in industry spawns other 0.5–2 jobs in other sectors. Despite this replication capacity, in the post-crisis period, the EU manufacturing industry lost 3.5 million jobs, and its performance in terms of competitiveness did not keep the pace with other rivals.

While recognizing the importance and vital role of industry in the sustainable recovery of economic growth and creation of jobs in the post-crisis period, the EC has set a target of 20% for the contribution of industry to GDP by 2020; and for that purpose, it laid down new coordinates for an EU industrial policy, with priority objectives and actions to be taken, as follows:

Key priorities:

I. Integrating industrial competitiveness with all the other areas of economic policies, considering the contribution of industry to competitiveness and economic performance for the entire EU;
II. Maximizing the potential of the internal market;
III. Making effective use of the instruments for regional development so to help boost innovation, skills and entrepreneurship;
IV. Promoting access to resources and encouraging investment;
V. Facilitating the integration of EU companies into global value chains.

The following actions aim to upgrade a broad platform of industries: manufacturing industry, constructions, raw materials, tourism, creative industries, and the related business services, such as—

- putting in place a stable, simplified and predictable legal framework for the business environment;
- creating the conditions for internal market services;
- integrating the capital markets;
- ensuring access to energy and raw materials at affordable prices, with terms similar to those of the world market;
- implementing European financing instruments based on the optimum mix of the programmes COSME, HORIZON 2020, Structural Funds and of the national innovation, investment and reindustrialisation funds;
- recreating normal conditions for the financing of the real economy, for which purpose the European Investment Bank will have to play the strategic role of monitoring financing, particularly that which is targeted at supporting innovation and industrial projects. Similarly, the EU will supervise the development of the necessary framework for the development of alternative sources of finance, including measures to eliminate bottlenecks resulting from the fragmentation of the financial markets;
- supporting the progressive integration of EU companies, particularly SMEs, in international added value chains of, by helping them to operate beyond EU borders (Box 6.1).

6.3 Experiences From Other Countries' Efforts to Support the Industry Development, Innovation and Competitiveness

On the global scale, all countries have strategies and programmes to support—in one way or another and more or less, depending on the available financial resources— industrial development, innovation and competitiveness.

Box 6.1. Objectives and Actions to Encourage Industrial Renaissance in the EU

Objectives	Actions
Supporting industrial competitiveness	The Communication *For a European Industrial Renaissance*, adopted on 22 January 2014, focuses on supporting industrial competitiveness, and the EC invites the European Council and the Parliament to take action for the reindustrialisation of Europe and for the encouragement of growth and competitiveness.
Regulation and policy initiatives	The Commission strives to maximise the efficiency of the regulatory policies and legislation governing the industrial sectors and to promote the integration of the EU's priorities into the national regulatory policies of the member states. DG internal market is preparing a road map on industrial competitiveness, accompanied by adequate policies, including aspects related to the competitiveness, as part of the European Semester. The Commission is monitoring the progress made by the EU member states towards improving competitiveness through the *EU Competitiveness Report* and the member states' reports on competitiveness.
Functional Internal Market	In order to support the functionality of the Internal Market, the Commission shall— – develop adequate infrastructure; – improve public administration and simplify the business environment; – act towards the liberalisation and integration of the internal energy market; – promote market surveillance and product safety; – set standards to accelerate innovation and observe intellectual property rights; – make sure that the services related to the internal market contribute to industrial competitiveness.
Access to resources	Actions

Objectives	Actions
Energy and raw materials	Access to critical inputs, especially energy and raw materials, at affordable prices aligned with international costs, will be a key factor in encouraging investment in the EU's industry. The main element that keeps the price distortion between the EU and the US, to the detriment of the EU (where the price of electricity is twice as higher as it is in US, and natural gas three- to fourfold higher) is the high level of taxation, including the excise tax. The Commission will act towards the drafting and enforcement of the economic policy instruments both for the UE, and for its member states, which might cause distortions of prices into disproportionately higher prices for inputs. In order to secure access to critical inputs, the Commission has put in place, in addition to the Communication of 22 January 2014, a package of measures regarding climate and energy until 2030.
Skilled labour	In order to make possible the development of human capital, the EU initiatives focus on— – Ensuring mobility of learning (Erasmus + student practice and exchanges); – Making the most of the green economy and the ICT sector to generate new jobs and skills; – Easing industrial exchanges at the regional level, in order to support EU regions to upgrade their industrial base.
Finance	Provide an increasingly greater share of the EU funds allocated for the member states to regions and to the industrial sector, in order to stimulate investments in innovation (COSME Programme, ESIF funds, Horizon 2020); Improve SMEs access to finance, as SMEs provide some two-thirds of the jobs in EU 28; Develop the public sector's capacity to provide financing, by diversifying and taking over some of the risks through EU guarantees; render more functional the pan-European risk capital market and the use of alternative sources of financing.

Objectives	Actions
Promoting investment in innovation	Six strategic areas of innovation have been identified where investment is encouraged: advanced key-enabling technologies (KETs)," clean" vehicles, bio-based products and construction, raw materials and smart grids; promoting industrial clusters ("innovative ecosystems") and support services for SMEs' innovations. Encourage the commercialization of innovative products and services on the demand side, for example, through measures such as public procurement in innovation.
Developing key technologies	Stimulate the development of key technologies to shape the future of the EU industry, including European large-scale projects like development of batteries for electric mobility, intelligent materials, highly efficient production and industrial bio-processes.
Access to international markets	Render support to companies operating outside EU borders, thereby helping them integrate into global value chains, as a complement to the companies' own effort to go international and to access world markets. This can be done through various instruments, such as Free Trade Agreements, Economic Missions for Growth and Market Access Strategies, subject to the observance of the agreements signed under the WTO. At the forthcoming negotiations, with the help of diplomatic missions, special attention should be devoted to improving the access of EU companies to the raw materials available in various parts of the globe.
Supporting strategic sectors	Monitoring sectors: put in place the requisite conditions to boost competitiveness; review regularly the adequacy of the existing background through polling all the interested parties, verify the results of such polls and the evaluate of the cumulative costs. Space: ensure the marketability of the services provided by key strategic sectors where investment has "spillover" effects, such as the global satellite navigation system (Galileo) and Earth monitoring (Copernicus).

Source: Authors' own compilation based on data from European documents, DG Internal Market, Industry, Entrepreneurship and SMEs

In the US for instance, industry, academia and federal partners have been gathered through a network of advanced manufacturing and innovation strategy under the public name *Manufacturing USA*, enacted into law in 2014 (US Government 2016).[1] Beside this strategy, in order to support businesses and R&D infrastructure, there are programs and initiatives such as SelectUSA, for the attraction and retention of business investment; Investing in Manufacturing Communities Partnership, designed to revolutionize the way federal agencies leverage economic development funds; AMTech, to strengthen existing or establish new industry-driven consortia that address high-priority research challenges; Hollings Manufacturing Extension Partnership to commit services and partnerships strengthening the US manufacturing; MForesight, a mechanism to provide coordinated private-sector input on national advanced manufacturing technology research and development priorities; National Export Initiative, to help more American companies reach more overseas markets and expand opportunities to sell their goods and services abroad; National Robotics Initiative, to develop the next generation of robotics; and National Nanotechnology Initiative and Materials Genome Initiative, to discover, manufacture and deploy advanced materials.

To support reindustrialization and the increase national competitiveness, the US federal government has made efforts to find the best ways to create new jobs in manufacturing, optimise tax incentives and structure and stimulate investments and R&D spending. With regard to targeting industries with highest value added, the state of California state has been a success story, concentrating the manufacturing of the most advanced computer and electronic products, to the point that it has become an innovation hub and US innovation incubator (Subran 2013, 32).

At the EU level, a number of funding possibilities related to programmes and instruments that support, directly or indirectly, business internationalization and better framework conditions, amounting to tens of billions of euros in the financial exercise of 2014–2020, have been set, among others, COSME (Competitiveness of Enterprises and Small and Medium-sized Enterprises); ICI (Industrialised Countries Instrument); PI (Partnership Instrument); ENI (European Neighbourhood Instrument); DCI (Development Cooperation Instrument) and EDF (European Development Fund); HORIZON 2020; ESIF (European

Structural Investment Fund) to which, more recently, the European EPI (External Investment Plan) has been added. As noted by an official document of the EC, the potential interested stakeholders and SMEs in particular are not sufficiently aware of these significant EU funding possibilities (European Commission 2017).[2]

With regard to specific national policies and instruments to support competitiveness, the internationalization of companies and the increase in exports of goods and services, although there are some limitations on the government's ability to manoeuver imposed by international rules and/or agreements, the operationalization of measures in this area can be better focused, which ensures a higher consistency of their applicability and, implicitly, the achievement of the expected effects. Table 6.1 presents the human and financial resources of selected countries for sustaining competitiveness, exports and internationalization of companies, including SMEs.

If we analyse some European experiences, we find that the most notable results have been obtained by countries that have designed and implemented a coherent system with a quasi-unitary administration and a clear objective to maximize the competitiveness of companies in external markets, directly from that country but also indirectly, using the process of internationalization throughout the global value-added chains and using the third countries as exporting platforms.

An example of a success story is Italy, which may seem less significant, given that it is not a leading economic power. But from the viewpoint of

Table 6.1 Human and financial resources mobilised by some of EU and non-EU countries to promote competitiveness, exports and internationalization of companies in 2013

Agency (country)	Number of employees[a]	Expenditures (mil. euro)
US Commercial Service (USA)	1700	230
JETRO (Japan)	1600	240
KOTRA (South Korea)	1100	250
UKTI (United Kingdom)	1600	440
UBIFRANCE (France)	1400	360
ICEX (Spain)	600	100
ICE (Italy)	900	110

Source: Based on data from Graph 2 of *Piano della Performance 2015-2017*, ICE, p. 19,

[a]In both domestic and foreign–based offices

international exchanges its case is remarkable: until 2011, Italy recorded trade deficits between 10 and 30 bn. euro; since then, the trade balance has become positive with the surplus growing steadily and reaching more than 45 bn. euro in 2015 (414 bn. euro compared to 369 bn. euro in imports). The performance is noteworthy given that only nine of the EU member states managed to achieve trade surpluses, with Italy ranked third in this respect, being exceeded only by Germany (252 bn. euro) and the Netherlands (55 bn. euro).

Among the EU's emerging countries, the Czech Republic seems to be a good example from the point of view of export support capabilities, having managed to achieve more and more consistent trade surpluses throughout the post-accession period, reaching over 16 bn. euro in 2015 (143 bn. euro exports vs. 127 bn. euro imports). Both the Czech Republic and Romanian exports are characterized by a high degree of concentration in the composition of product groups (dominated by several industrial sectors, namely, cars and electronics) and also as geographic destinations (around 70% on EU markets), with around two-thirds of total exports being provided by companies with foreign capital.

Below, the system, mechanisms and instruments that have led to such performances in the cases of Italy and Czech Republic, two of the most important economic partners of Romania are presented, as lessons which can be learned.

Italy's System for the Support of Industry, Investments, Exports and Internationalisation of Italian Companies

I. *Cassa Depositi e Prestiti (CDP), a joint venture with majority public shareholding* (Capital: 3.5 bn. euro; Shareholders: 80.1% Ministero dell' Economia e delle Finanze; 18.4% various banking foundations; 1.5% its own shares)

CDP ha 165 years of history, having been founded in 1850 by King Vittorio Emanuele II, financed by the state and various public entities.

In 2003 CDP was converted into a joint stock company, and since 2009 its scope of business has expanded to the direct funding of public interest projects, financing exports, social housing and SME support.

The Parliament of Italy and the EU assigned in 2015 to the CDP the status of National Promotion Institute (*Istituto Nazionale di Promozione*), which gives the CDP the prerogatives to—

- represent the only channel for accessing the resources of the Junker Plan for Italy;
- act as financial advisor to the public administration bodies, for a better use of national and European funds;
- stimulate the development of new activities with a view to contributing to the country's economic growth, starting from design; cooperating in the identification of resources; co-investing its own resources; and attracting the private investors as well.

The CDP Mission and purpose of business is promote the development of the economic and industrial system of Italy, through providing finance from postal savings guaranteed by the state and from the issuance bonds, in order to contribute to—

- financing public investments, sustaining international cooperation and developing the country's infrastructure;
- supporting Italian companies during their entire life cycle, encouraging start-ups and innovation, investing in companies of national importance;
- promoting exports and internationalisation, improving competitiveness of the national productive system and supporting the growth factors of the national economy;
- developing the Italian real estate market, acting as a main operator of social housing at affordable prices and reviving the areas of activity that carry a strategic interest for the country.

The total resources of CDP at 31 December 2015 were 323 bn. euro, of which 252 bn. euro came from postal savings derived from selling state-guaranteed Postal Savings PassBooks and Postal Savings Bonds through the approximately 13,000 post offices in Italy. Over 20 million Italians have invested in these saving instruments.

In 2015, the CDP Group attracted and managed financial resources of more than 30 bn. euro that have been invested in sustaining the Italian

companies businesses and supporting their internationalisation (22 bn. euro), the public and local entities (6 bn. euro) and infrastructures (2 bn. euro).

The *2016–2020 Industrial Plan (Piano Industriale Gruppo CDP 2020)*[3] enables the CDP to make available to Italy 160 bn. euro, supplemented with another 105 bn. euro of internal and external public and private funding attracted to the system in order to develop four strategic domains:

- services of general economic interest for governance and public Administration (supporting public investment and international cooperation);
- infrastructure, environmental protection and energy efficiency (including PPP and access to capital markets);
- supporting companies throughout their entire life cycle and sustaining exporting activities, for which some three-quarters of the allocated financial resources are earmarked;
- real estate sector (social housing and tourism).

II. *SACE—Mission and scope of business*

- insurance services and products;
- access to finance for investments in innovation;
- providing financing and guarantees for the internationalisation of Italian companies, SMEs included;
- protection of Italian investment projects abroad against political risks;
- providing guarantees for the participation of Italian companies in international tenders;
- granting foreign clients payment concessions of up to 12 months;
- consultancy for export (maps and country risk profile for 189 countries, export forecasts).

SACE, with net assets of 4.7 bn. euro and over 80 bn. euro insurance operations in 189 countries, sustains the competitiveness of 25,000 companies in Italy and abroad, turning risks into opportunities for development.

SACE uses the Sviluppo Export Fund and Trade Finance as instruments to boost exports and internationalisation.

III. *Simest—Mission and scope of business*

- support Italian companies' efforts to expand internationally through equity investment up to a 49% stake of the nominal capital of business ventures established by Italian companies abroad, through direct investment in EU countries or through the Venture Capital Fund, in EU and non-EU countries;
- support loans for exports of investment goods produced in Italy;
- provide financial instruments to support exporting SMEs;
- finance participation of Italian companies in international fairs and exhibitions outside the EU;
- subsidise feasibility studies and technical assistance programmes.

In 2015 *Simest* attracted and managed financial resources of 5.4 bn. euro (up from 2.6 bn. euro in 2014), of which 5.3 bn. euro were allocated to encourage exports and internationalization of some 1300 Italian companies in over 100 countries. In 2015 alone, Simest invested 107 mil. euro in the social capital of the companies set up by Italian companies abroad.

IV. *Istituto per il Commercio con l'Estero (ICE)*

Mission and scope of business: promote internationalisation of Italian companies, and the image of Italian products in the world (initiatives like *Made in Italy, Sistema Italia*), with the help of—

- first guidance services (general information, market information, export opportunities, statistics, virtual showcases), free of charge;
- personalised services (market studies, client searching, business meetings, consultancy/assistance to penetrate/operate in a market, organisation of promotional events), for a moderate fee.

ICE has offices both in every region of Italy and outside the country (79 representative offices in 64 countries), and closely cooperates with the diplomatic missions and the foreign-based offices of the Italian Chamber of Commerce. In order to achieve its objectives, ICE has put in place cooperation arrangements with other institutional structures: regions,

Table 6.2 The public system for supporting Italian companies' exports and internationalisation (2015)

System entities	Number of users	Funds expended (mil. euro)
Promotion services		
Ministry of Economic Development (Ministero dello Sviluppo Economico)	152	30
Regions	–	106
ICE	39,784	110
Chambers of Commerce	43,033	40
Financial services	**Number of assisted companies**	**New insurance commitments (mil. euro)**
SACE	24,443	9.750
	Number of assisted companies	**Equity/worth of assisted transactions (mil. euro)**
Simest	27	1389/3075
Simest	269	509/5281

Source: Authors' own compilation based on data from *Il sostegno publico all'internalizazzione delle imprese*, ICE, 2016, p. 307

provinces, ministries, universities and business organisations (Confindustria, Unioncamere, company networks, professional associations). In 2015, ICE had over 500 employees in Italy and some 400 others in its offices abroad, plus a number of domestic staff in each such country (Italian Trade Agency 2016)[4] (Table 6.2).

The Czech Republic's System for Supporting Industry, Investments and Exports

The Czech Republic's system for supporting industry and investments includes the Ministry of Industry and Trade and its Agency for Business and Investment Development (CzechInvest), the Ministry of Foreign Affairs and its external network of economic advisers attached to the foreign embassies, Czech Export Promotion Agency (CzechTrade).

CzechInvest has as its main objectives to develop domestic companies through its services and financial support programmes and to attract foreign investors, being authorised to grant investment incentives. CzechInvest focuses on increasing the Czech economy's competitiveness and the country's business infrastructure and innovation. The agency also

promotes the interests of Czech companies abroad and helps SMEs in implementing the EU structural funds in the Czech Republic. CzechInvest has 260 employees, eight of which are in offices abroad (such as in the US, China and UK), plus 22 foreign centres promoting the image of the country worldwide. In 2014 and 2015, the investments managed by CzechInvest had an aggregate value of nearly 5 bn. euro, creating more than 30,000 new jobs, most of them in electronics and vehicle manufacturing.

The Czech Republic's *Strategy for Competitiveness 2016: Industry for the 21st Century* focuses on ten industrial sectors that are seen as having a significant potential for development and which are then targeted by CzechInvest support, among them nanotechnology and advanced materials, automotive industry, aerospace, high-tech mechanical engineering, ICT, electronics and electrical engineering, energy and environment.

CzechTrade is offering comprehensive support to Czech exporters through a variety of services, by establishing business contacts for them, finding valuable business partners, providing marketing assistance and long-term assistance in the territories they operate in and helping companies to participate in international fairs and business missions. The agency has 120 employees in 45 external offices in 48 countries (Wnukowski 2016). In 2014, CzechTrade managed more than 3200 export opportunities, and its foreign offices were involved in nearly 1300 contracts. The agency helps the implement the Czech Republic's *Export Strategy 2012-2020*, which is built on three pillars and provides support for exporters in order to diversify the structure of exports and to expand on external markets outside the EU (12 priority countries and 25 countries of interest have been defined), as well as to gain a more advantageous position in international value chains through the production of goods and services with high added value.

This system is completed by two financial support structures, namely, the Czech Export Bank (CEB), which has granted export credits worth about 15 bn. euro in the last 10 years (of which about 80% are generated by the SME segment), and Export Insurance and Export Guarantees (EGAP), which secured new export credits, bank guarantees and foreign investment worth about 2 bn. euro in 2015 (accounting for 54% of total export insurance).

Notes

1. US Government, *National Network for Manufacturing Innovation Program. Strategic Plan*, Executive Office of the President National Science and Technology Council, Advanced Manufacturing National Program Office, https://www.manufacturingusa.com/sites/prod/files/docs/resource/2015-NNMI-Strategic-Plan.pdf, February, 2016.
2. European Commission, *Overview of EU Instruments contributing to the internationalization of European Business*, DG for Internal Market, Industry, Entrepreneurship and SMEs, EC, 2 March 2017.
3. *Piano Industriale Gruppo CDP 2020. Linee guida strategiche*, Press Conference, Rome, 17 December, 2015.
4. Italian Trade Agency, *Piano della Performance 2015-2017*, ICE, Rome, 2016.

References

Burritt, Roger, and Katherine Christ. 2016. Industry 4.0 and Environmental Accounting: A New Revolution? *Asian Journal of Sustainability ans Social Responsibility*, December. doi:https://doi.org/10.1186/s41180-016-0007-y.

European Commission. 2017. *Overview of EU Instruments Contributing to the Internationalization of European Business*. DG for Internal Market, Industry, Entrepreneurship and SMEs, EC, 2 March 2017.

Italian Trade Agency. 2016. *Piano della Performance 2015–2017*. Rome: ICE.

Piano Industriale Gruppo CDP 2020. 2015. *Linee guida strategiche*. Press Conference, Rome, 17 December 2015.

Subran, L. 2013. *The Reindustrialization of the United States*. Special Report No. 1187, Euler Hermes Economic Outlook, 25 January 2013. http://www.eul-erhermes.dk/oekonomisk-analyse/Documents/Outlook_no.1187.pdf

US Government. 2016. *National Network for Manufacturing Innovation Program. Strategic Plan*. Executive Office of the President National Science and Technology Council, Advanced Manufacturing National Program Office, February 2016. https://www.manufacturingusa.com/sites/prod/files/docs/resource/2015-NNMI-Strategic-Plan.pdf

Wnukowski, Damian. 2016 (February 24). Export Promotion Agency: The Experience of Selected European Countries. *PISM Bulletin* 18: 868.