

### Commissariat général à la stratégie et à la prospective



### Which Production Model?

In the aftermath of the Second World War, France established an effective production model that ensured steady growth and low unemployment: a 30-year post-war boom that became known as the "Trente Glorieuses". That model began to reach its limits in the 1980s, and was ill suited to face globalisation, as well as the accelerated pace of product and process revisions induced by innovation. France's strengths in certain domains (infrastructure, major corporations, a well-trained elite, demography) were offset by real weaknesses in others; unemployment rose and its international trade position deteriorated continuously. Potential growth slowed. These results are the consequence of a set of factors, including the weakness of the sectors exposed to international competition, stagnation in Total Factor Productivity (TFP), a decline in corporate profitability that impedes their ability to innovate and therefore to export, a dual labour market, a rigid system of initial and continuing education, and poor coordination amongst the institutions that underpin that production model. France must now make critical choices to increase the performance of its production model while organising the transition to sustainable growth. In particular, these choices bear upon the relationship between the training system and employment, the organisation of the labour market, the level of competition in the protected sector, corporate governance and finance, and presence in international trade.

# INTRODUCTION

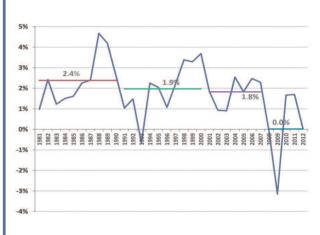
Even before the 2008 crisis, the performance of the French economy was disappointing. France's strengths in some areas were offset by weaknesses in others; a resulting slowdown in technological progress led to lower growth. During that same period, the trade balance deteriorated and the unemployment rate never fell below 7%. Since 2008, the French economy has demonstrated its difficulty in absorbing the massive impact of the crisis. The strengths remain, but the weaknesses are tending to dominate them. Several complementary approaches can be used to better identify the origin of these shortcomings and provide a diagnosis. The first approach highlights macroeconomic imbalances induced by the difficulties of the sector exposed to international competition, in terms of industry but also tradable services. A second approach focuses on the barriers to innovation and corporate investment. The third and final approach is more systemic, and highlights inconsistencies within and amongst stakeholders in the production system (e.g. training system, R&D organisation, B2B relationships). These diagnoses give rise to three questions, which demand clear answers. The first question concerns policies designed to boost potential growth. These policies must consider the social demand for highquality growth. The second relates to the organisation of the production system, as well as consistency between social relations, corporate governance and the institutions of the labour market. Finally, we must reflect upon France's presence in world trade.

# ASSESSMENTS

#### **PROGRESSIVELY WEAKER GROWTH**

The French economy's average growth rate has been steadily declining for more than twenty years (Chart 1). It was 2.4% in the 1980s, 1.9% in the 1990s, 1.8% in the years preceding the crisis (2000-2007) and zero from 2008 to 2012.

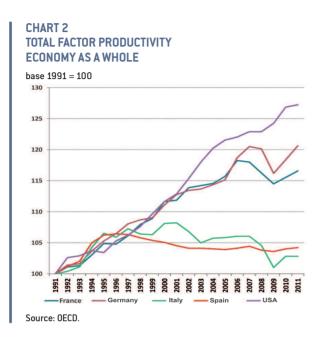
#### CHART 1 GROWTH RATE OF THE FRENCH ECONOMY PER DECADE SINCE 1980



Source: INSEE, National accounts.

A breakdown of the sources of growth (see Box) shows that before the crisis, this downturn was due to a slowdown in Total Factor Productivity (TFP, a measure of "technical progress"); the contributions of capital and labour to growth were stable during the period. Between 2008 and 2010, the decline in GDP corresponds to a collapse of the contribution of labour and gains in TFP, while the contribution of capital remained constant.

Although the pace of technical progress in the overall economy (Chart 2) tracked the United States until the early 2000s, productivity accelerated afterward in the US, while it slowed in France and Germany. In Spain and Italy, a discontinuity occurred in the mid-1990s, marked by a stagnation in TFP.

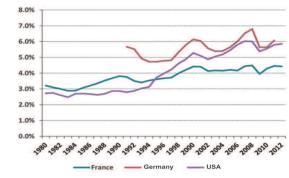


The relative weakness of TFP gains in the economy is due to:

- a slowdown in TFP growth for industry;
- a decrease in the importance of industry in the economy, even though productivity gains are traditionally strongest in the industrial sector;<sup>1</sup>
- a stagnation of TFP gains for market services, while they accelerated in this sector in the US.<sup>2</sup>

At the aggregate level, investment held steady in France in the pre-crisis period, helping to sustain growth. However, corporate investment in machinery and equipment is nearly 2 percentage points lower than for German and US firms (Chart 3). Therefore, France and Germany do not particularly differ in terms of their total investment in the economy, but rather in the composition of these investments: investment in France is less focused on boosting production capacity.

CHART 3 RATE OF INVESTMENT IN MACHINERY AND EQUIPMENT





A notable difference in investment behaviour between French and American firms concerns intangible assets.<sup>3</sup> Recent studies comparing not only the capital stock of intangible assets reckoned by the national accounts (e.g. software, literary and artistic property, mineral exploration) but also new intangible assets (e.g. capital in R&D, design, market research, advertising, training and organisational capital) demonstrate that the gap with the US primarily concerns investments in software. This underscores France's lag in broadening the implementation of the digital economy.

Concerning R&D spending, France was near the OECD average until the early 2000s for the portion of its spending in GDP; today, this is no longer the case. The gap with Japan, the US and Germany has widened, and the figure is becoming closer to that of emerging countries, China in particular.

# A DECLINING POSITION IN INTERNATIONAL TRADE

The downward trend in France's export market share epitomises its low resistance to international competition, particularly from Germany. Market share summarises trends in export compared to foreign demand for goods and services. It shows that France's market share decrea-

<sup>1.</sup> According to EU KLEMS data, average growth in overall industrial productivity was nearly 3% from 1991 to 2006, against only about 1% for market services (excluding real estate services).

<sup>2.</sup> According to EU KLEMS data, the source of accelerated TPF growth for services in the US is not financial services, but other market sectors.

<sup>3.</sup> However, they contributed more than half the labour productivity gains between 1995 and 2007.

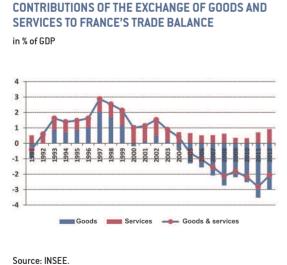
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sed from 6% in 1994 to less than 4% in 2012, whereas Germany was able to maintain its performance. Over the same period, the US, Italy and Spain also lost shares in the export market.

This reduced competitiveness, while imports remained dynamic, shows up as an imbalance in the current account, reaching 2.2% of GDP in 2012. France's trade balance is deteriorating due to the exchange of goods (Chart 4), thus underscoring the weakness of the industrial sector. In contrast, there is surplus in exchanges of services that is stable over time but insufficient to offset the deficit. In addition, there is a sharp contrast between France (where services account for over one-fifth<sup>4</sup> of its exports and present a surplus) and Germany (with a deficit in services exports that, in any case, only account for 15% of its total exports).

Revenue from tourism figures prominently in the services trade. It exceeded 7% of GDP in 2012. France is ranked first for the number of stays of foreign tourists and ranks third in receipts (after the US and Spain), in a context of increasing international tourism demand, particularly from emerging countries.

#### CHART 4



#### HIGH UNDEREMPLOYMENT AND A DYSFUNCTIONAL LABOUR MARKET

#### In an international context, France has long posted a high unemployment rate

According to harmonised OECD data, the unemployment rate in France is 10.2%, against 5.4% in Germany and 11.3% in the eurozone. The crisis has very severely affected the young, the elderly and immigrants. Moreover, the rate of long-term unemployment reached 4.2% at the end of 2012, against 2.3% in Germany and 5.7% in the eurozone.

Since the early 2000s, France's employment rate increased slightly (+ 2 points) due to the sharp increase in employment for women:<sup>5</sup> at the end of 2012, 63.9% of France's working age population was employed. The employment rate in France is, however, still lower than in our principal European partners: nearly 73% of the working age population is employed in Germany, 75% in the Netherlands and over 70% in the UK. Reaching the goal set by the European Commission within the framework of the Europe 2020 Strategy – an employment rate of 70% – would raise growth potential by 0.5%. Within the EU, France stands out for its low participation rate in the workforce among young people (15-24 years) and seniors (over 55) and a high rate for those aged 25-54.

#### France has a dual labour market where the probability of moving from unstable employment to permanent employment is very low

A group of salaried employees benefits from a relatively protected employment status: this stable core (imperfectly measured by the number of workers with at least ten years of service in their company) appears relatively numerous in France: 45.6% of the total employed population in 2011, against an average of 36.5% in OECD countries and 42.2% in the EU 15.

The proportion of temporary employment in France rose from 6% in 1982 to 15% in 2012 (against, for example, 6.5% in the UK, 8.5% in Denmark and about 13.8% in Italy and Germany). This results in increased labour turnover concentrated in certain sectors, in particular the ser-

<sup>4.</sup> Figure calculated from WTO data, Trade Profiles 2012, Geneva, 2012 http://www.wto.org/french/res\_f/booksp\_f/anrep\_f/trade\_profiles12\_f.pdf.

<sup>5.</sup> Between 2000 and 2012, it decreased by almost one percentage point for men (to 67.9%) and increased by more than five points for women (to 60%). Since the beginning of the crisis in 2008, the employment rate for men has fallen more than two points and has remained virtually unchanged for women.

vices sector, which are strong creators of jobs, albeit jobs of low quality (e.g. wages, working conditions, hours of work, mobility).

This duality of the labour market coexists with a growing polarisation of jobs at the two extremities of the skills ladder. This polarisation is not unique to the French economy

#### **BOX: POTENTIAL GROWTH**

#### What does it constitute?

Potential growth is a measure of long-term growth from the viewpoint of an economy's fundamentals. It can be estimated from its three main components: the amount of available work (employment), the amount of capital that can be mobilised (investment) and the TFP; the latter measures technical progress, and more generally all the sources of growth not accounted for by employment and investment. TFP is a remainder that, moreover, can be best measured by considering not only the contribution to growth from the quantity of labour and capital used but also their "quality". Forecasts of potential growth are habitually based on the

### Productivity and investment were formerly the principal drivers of growth.

continuation of trends observed in the past.

Based on data from the INSEE<sup>6</sup>, between 1983 and 2007, the French economy grew at 2.1% per year. This can be primarily explained by the increase in productivity and the contributions of capital and labour. The weakening of potential growth, beginning in the early 1990s, resulted from lower contributions of TFP, capital and labour, which combined to stabilise growth (Table 1).

This does not change when the quality of production factors is considered in addition to their quantity (Table 2).

Under "moderate" scenarios, estimates of France's potential growth over the next ten years are about 1.5% per year Based on past trends and in view of demography, projections of potential growth in France for the next ten years are around 1.4% to 1.5% on average per year: the OECD and the IMF predict an average of 1.5% growth in France by 2020; the European Commission predicts growth on the order of 1.4%.

#### The impact of the crisis on potential growth is uncertain.

However, the effects of the crisis on potential growth, which typically involve reduction of capital stock and of investment, higher unemployment and lower participation rates, can be durable. The uncertainty that prevails today concerning the extent of the crisis and its long-term effects on the functioning of the French economy makes it difficult to estimate potential growth. In this context, "black" scenarios can be envisaged, in which the contributions of all production factors fall significantly below their pre-crisis values. While the maintenance, or even the increase, of participation rates in the French labour market since the crisis provides an element of optimism, trends in the TFP are a subject for concern. We cannot completely exclude an "Italian-style" scenario, where the TFP remains static in the long-term. Potential growth in France would decline by 0.7% to 1.1% compared to the "moderate" scenario envisioned by international institutions: potential growth in France for the next ten years would be in the range of 0.3% to 0.7%.

### TABLE 1. BREAKDOWN OF GROWTH IN FRANCE OVER THE PERIOD 1983-2010 WITHOUT ALLOWING FOR QUALITY OF PRODUCTION FACTORS

	Growth of value added	Contribution of labour	Contribution of capital	Total Factor Productivity without factor heterogeneity
1983-2007	2.1%	0.1%	0.6%	1.4%
1983-1989	2.5%	-0.1%	0.6%	1.9%
1990-1999	1.9%	0.0%	0.6%	1.2%
2000-2007	2.0%	0.2%	0.6%	1.1%
2008-2010	-0.4%	-0.3%	0.7%	-0.9%

Source: Cabannes P.-Y., Montaut A. et Pionner P.-A. (2013)

#### TABLE 2. BREAKDOWN OF GROWTH IN FRANCE OVER THE PERIOD 1983-2010 ALLOWING FOR QUALITY OF PRODUCTION FACTORS

	Growth of value added	Contribution of labour	Contribution of capital	Total Factor Productivity without factor heterogeneity
1983-2007	2.1%	0.3%	0.9%	0.9%
1983-1989	2.5%	0.2%	0.8%	1.5%
1990-1999	1.9%	0.4%	0.9%	0.6%
2000-2007	2.0%	0.4%	0.9%	0.7%
2008-2010	-0.4%	0.0%	0.8%	-1.2%

Source: Cabannes P.-Y., Montaut A. et Pionner P.-A. (2013)

<sup>6.</sup> Source: P.Y. Cabannes, A. Montaut A. and P.-A. Pionner (2013), "Évaluer la productivité globale des facteurs: l'apport d'une mesure de la qualité du capital et du travail" (Assessing total factor productivity: adding a measure for the quality of capital and labour), *L'économie française*, Édition 2013.

## PROSPECTIVE ASSESSMENT

The diagnosis of the weaknesses in the French production model is founded on three major, non-exclusive approaches. The first approach is macroeconomic. It emphasises the imbalances generated by changes in costs and the effects of the decline in the industrial sector. The second is microeconomic: taking the corporate point of view, it highlights the barriers to investment and innovation. The third is systemic and focuses on the lack of consistency in policies and institutions.

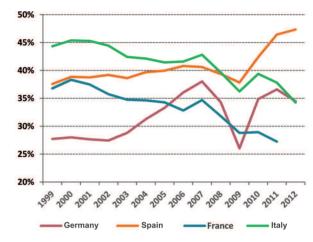
#### THE MACROECONOMIC APPROACH

# The decline in profitability of French industrial corporations impedes their ability to invest, innovate and export.

Problems in growth and international trade are the result of weakness in France's export sectors: agriculture, industry and tradable services. The industrial sector generates nearly 80% of domestic R&D spending and exports of goods and services. Industry's lack of dynamism is a repercussion of low margins, which are in turn the result of the poor adaptation between French companies' product lines and their production costs. In fact, France produces midrange goods at high costs. It therefore faces competition from countries like Germany, which produce higher-end goods at increasingly lower costs, and from countries producing lower quality goods at low costs. To address this international competition, French companies must lower their margins and thus reduce their capacity for investment and innovation.

Corporate profitability, as measured by profit margins, is in sharp decline. Margins decreased from 38% in the 2000s to 35% in 2012. This trend masks strong sectoral disparities. During the same period, industrial profit margins dropped drastically, from 33% to 27% (Chart 5), a decrease twice the average of other sectors. In comparison, German and Spanish industrial firms' margins rose since the early 2000s, while they dropped at the same rate in Italy as in France.<sup>7</sup>

#### CHART 5 Industrial profit Margin



Source: European Commission (AMECO database); CGSP calculations.

Cost trends indicate that the shrinking margins of French industrial firms result not only from wage dynamics but also from industrial input prices (Chart 6). There are several factors driving input prices higher. Price increases for imported goods (including raw materials) are identical in France and Germany and therefore do not have a major effect on the growth differential for input prices between the two countries. Dissimilarity in the operation of the two economies must therefore explain this differential.

Industrial input prices depend on wage and labour productivity trends in other sectors of the economy, particularly services. Unit labour costs (taking labour productivity into account) are a primary source of the differential. The slow growth of unit labour costs in Germany, as compared to France and the rest of Europe, is well known. A more detailed analysis shows that the divergence is much more evident in the market services sector than in industrial manufacturing.

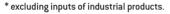
<sup>7.</sup> Regarding profit margins, solely comparisons of trends over time between countries are relevant. Margin levels cannot be compared from one country to another because they depend on, amongst other things, the detailed composition of the sector in different industries and the capital intensity of each one.

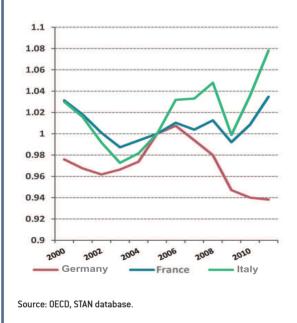
Industrial input prices also depend on several other factors that have different dynamics in France and Germany, including corporate tariffs for energy,<sup>8</sup> which are higher in Germany but which grew less rapidly, real estate prices,<sup>9</sup> taxes paid by the companies that provide the inputs, and corporate margins in the business services sector.

At the macroeconomic level, these elements are not independent and can reinforce each other. For example, higher real estate prices weigh on companies' direct costs but also on households and therefore, *ultimately*, on wage bargaining and wage dynamics.<sup>10</sup>

### CHART 6

#### INDUSTRY SECTOR INPUT PRICES\* / INDUSTRY SECTOR VALUE ADDED PRICES (BASE INDEX 2005 = 1)





#### Policies to restore appropriate production factor prices

In order to favour the French goods and services export sectors, policies should be pursued to restore margins and to encourage investment and innovation. This requires lower input prices (e.g. real estate prices), but also policies to reduce the cost of business services (e.g. via increased competition in that sector). In addition, a more investment-friendly tax system, particularly for SMEs (Small and Medium Sized Enterprises), would boost incentives to innovate.

#### THE MICROECONOMIC APPROACH

The French production system is struggling to create intermediate-sized, innovative enterprises that successfully export their products.

#### A typical business demography in all sectors; low labour mobility

The French economy is based on both large international groups<sup>11</sup> and a substantial number of SMEs. The shortage of intermediate-sized enterprises<sup>12</sup> (ISEs) is one of the causes of France's feeble export activity. There are less than 5 ,000 ISEs in France, half as many as are estimated in Germany and Great Britain.<sup>13</sup> The low number of ISEs is the result of growth difficulties for SMEs, and often, acquisitions of SMEs by large companies.<sup>14</sup> Business demography in France is atypical compared with those of its European partners. The percentage of firms that cease operations each year is almost identical in France and

J.C. Bureau, L. Fontagné and P. Martin (May 2013), "Énergie et compétitivité (Energy and competitiveness)", Les notes du Conseil d'analyse économique, n° 6, mai.
A. Trannoy and E. Wasmer (February 2013), "Comment modérer les prix de l'immobilier ? (How can real estate prices be moderated?)", Les notes du Conseil d'analyse économique, n° 2, février.

<sup>10.</sup> Beyond its direct and indirect effects, the increase in real estate prices has reduced the competitiveness of French companies via two effects: lower employee mobility (cf. M. Babès, R. Bigot and S. Hoibian (April 2012), "Les problèmes de logement des salariés affecteraient 40 % des entreprises" (Housing problems will affect 40% of corporate employees)", note de synthèse du CREDOC, avril) and a reduced ability of companies to invest in machinery and equipment: at nearly identical investment rates, French firms invest less in machinery and equipment than German firms (cf. "L'inflation immobilière et ses conséquences pour l'économie (Inflation in the real estate market and its consequences for the French economy)", in Rapport économique social et financier pour le Projet de Loi de Finances pour 2013, and P. Artus, A. Bozio and C. Garcia-Penalossa (September 2013), "Fiscalité des revenus (Income taxes)", *Les notes du Conseil d'analyse économique*, n° 9, septembre).

<sup>11.</sup> In the Fortune magazine "Global 500" (ranking by revenue), the number of French "champions" was 32 in 2012, placing France 4<sup>th</sup> in this regard (tied with Germany, and behind the US, China and Japan).

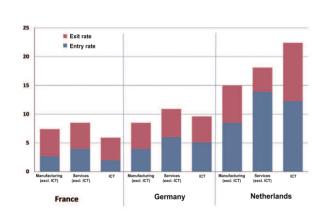
<sup>12.</sup> ISEs consist of companies with a headcount between 250 and 5 000 and annual revenue not exceeding 1.5 billion euros.

<sup>13.</sup> See the report "Les entreprises de taille intermédiaire (ETI) (Intermediate-sized enterprises (ISEs))", DGCIS, 2010.

<sup>14.</sup> See the report by L. Gallois (2012), "Pacte pour la compétitivité de l'industrie (Pact for industrial competitiveness)".

Germany for all sectors (non-ICT manufacturing, non-ICT services and ICT) (Chart 7). However, the rate of business creation is much higher in Germany than it is in France, particularly in the ICT sector. The comparison with the Netherlands is even more striking: more companies cease operations than in France, particularly in the ICT sector, but the rate of business creation is almost three times higher. Empirical work<sup>15</sup> demonstrates that growth in productivity depends on strong business demography.

A related observation can be made regarding labour reallocation. If we look at the rate of job creation and job loss in each sector, we also note less job *turnover* in France, particularly in comparison with the Netherlands. This is not necessarily a bad thing in a non-crisis context. However, in today's context, when innovation is crucial, it is an asset to have a strong capacity to reallocate labour between firms in the same sector or between sectors.



#### CHART 7 ANNUAL CREATION AND CESSATION OF BUSINESSES BY SECTOR\*

\* 2003-2007 average, in % of number of businesses in the sector. Source: E.J. Bartelsman (April 2013), "ICT, Reallocation and Productivity", *Economic Paper* 486, European Commission, DG for Economic and Financial Affairs.

#### Positioning in the global value chain is unfavourable; "non-cost" competitiveness is reduced

Observation of French companies' export prices shows that the degradation of France's performance is a result of poor positioning in the global value chain and/or a loss of non-price competitiveness, rather than loss of price competitiveness.

- One of the characteristic features of globalisation is the growing fragmentation of value chains. Germany has taken advantage of this, while France has struggled to find its place in the new international division of labour<sup>16</sup>, as demonstrated by lower imports of inputs.
- At the same time, products made in France generally have an inferior reputation for quality, reliability and after-sales service than German ones. This reputation is chiefly due to less-favourable positioning of the product line, as a result of inferior efforts to differentiate products: French production places less emphasis on intangible resources (skills, specialised knowledge), which are difficult to imitate and are engendered by technological, organisational and commercial innovation.

#### SMEs' capacity to internationalise burdened by a lack of skills in the workforce

Companies' internal characteristics are the main determinants of their presence in world markets, more so than the specificities of their home country or activity sector.<sup>17</sup> Compared to domestic firms, internationalised companies are generally larger, more productive, more capital intensive, better organised into groups and present in sectors with high or medium technological intensity. A link can be demonstrated between companies' ability to internationalise and the qualifications of their workforce: the proportion of senior/engineering level staff is higher in inter-

<sup>15.</sup> G. Nicoletti and S. Scarpetta (2003), "Regulation, productivity and growth", World Bank.

<sup>16.</sup> L. Fontagné and F. Toubal (2011), "Commerce de biens intermédiaires et compétitivité. Prospective du couple franco-allemand (Trade in intermediate goods and competitiveness, prospectives for the French-German duo)", rapport du Sénat, nº 663.

<sup>17.</sup> E. Dhont-Peltrault and A. Gazaniol (March 2012), "Les ressources humaines, clé de l'internationalisation des entreprises françaises (Human resources: the key to the internationalisation of French companies)", La Note d'analyse, n° 269, Centre d'analyse stratégique, mars.

nationalised firms than in domestic ones. Skills concerning management, marketing, logistics and complex tasks associated with internationalisation (international law, taxation, negotiations with intermediaries in the value chain) necessitate this high level of gualification.

There are well-known impediments to recruiting qualified individuals and managing skills in SMEs/ISEs: the difficulty of matching wages and benefits with those of large companies, of implementing management systems to optimise skills (continuing education, ability to anticipate requirements for skills), and the inadequate partnership between SMEs/ISEs and training and educational organisations (universities and *Grandes Écoles*). The tendency for those receiving the most prestigious training to follow a classic career path, primarily in the senior civil service and large internationalised groups – or the auditing/consulting/finance sectors that advise them – drains the pool of top talent needed to innovate, create businesses and develop SMEs/ISEs.

#### France struggles to attract foreign talent

Inadequate use of foreign talent by French companies is another factor behind their weak internationalisation. Labour immigration is low: 9% of new residence permits issued in 2012 were for professional reasons, against 20% in Great Britain, Spain, Italy and Canada. Student immigration, a means for France to participate in globalisation, is significant (30% of the annual flow of migrants): in 2012, 288,500 foreign students were enrolled in French universities, making it the fifth-ranked host country in the world, close behind Germany and far behind the UK. But the number of foreign students is growing much faster in the UK.

#### Policies to stimulate dynamism

Why are French companies not posting growth? Why don't they position themselves via innovation? One answer is

the complexity and instability of France's regulatory and tax environment. This complexity also applies to the labour market, and the accumulation of standards that sometimes results from the application of overlapping European directives<sup>18</sup>. A simplification must be carried out to benefit both companies and employees. Furthermore, the economic environment remains unfavourable to SMEs and ISEs. For example, the corporate tax rate is higher for ISEs than for large enterprises. Going beyond the large companies that play a pivotal role in their sector, policies favouring new businesses and innovation must be developed.

#### THE SYSTEMIC APPROACH

### The French production system lacks consistency.

A systemic interpretation reveals the inconsistency of the French production model. The relationship between businesses and their subcontractors is one of the shortcomings concerning coordination that, penalise all players. This lack of consistency also applies to the innovation system and to social relations in the workplace.

#### Intercompany relationships are flawed.

To its detriment, French industry has poor relations between businesses and their subcontractors. Non-compliance with payment deadlines gives rise to financing charges that handicap SMEs. In particular, large companies pay their suppliers with significantly higher delays than SMEs or ISEs. In 2011, PMEs paid in 53.1 days, against 65.1 days for large businesses<sup>19</sup>. International comparisons show that these payment delays are longer in France than in Germany<sup>20</sup>. Overall, intercompany mediation has identified over thirty bad practices, which consist, for a business, of imposing unbalanced clauses when subcontracting contracts are written or when they are carried out. These bad practices hinder the development of French SMEs, because they deprive them of the resources needed to ensure their stability.

<sup>18.</sup> See T. Mandon (2013), "La simplification collaborative (The collaborative simplification)", summary report, Mission parlementaire de simplification de l'environnement réglementaire et fiscal des entreprises.

<sup>19.</sup> Data from the Senate report "Les relations entre donneurs d'ordre et sous-traitants dans le domaine de l'industrie (Relationships between industrial sector businesses and their subcontractors)", prepared by Martial Bourquin.

<sup>20.</sup> See, e.g., the Atradius Payment Practices Barometer, May 2012.

### France's strengths for innovation are not fully exploited

The innovation system in France is top-ranked, yet it struggles to attain its full productive potential. Despite France's recognised assets (proportion of researchers in the population, number of graduates in science and technology), the performance of its innovation system is clearly disappointing. According to the European Commission's Summary Innovation Index (SII), France is currently above the average of the EU 27, far ahead of major emerging countries (e.g. China, India, Brazil), yet it lags behind the most innovative countries (Switzerland, Sweden, Denmark, South Korea, US, Germany, Japan). This classification is supported by the Global Innovation Index in the joint report published by Cornell University, INSEAD and WIPO (2013), where France was ranked 20<sup>th</sup> out of 142 countries<sup>21</sup>.

France's contrasting position regarding innovation suggests that its strong potential, particularly in scientific and technological resources in the public sector, is not sufficiently leveraged by the business sector: it does not yield its potential in terms of revenue and employment. Although innovation often has its roots in the university campus (which explains the importance of their attracting and retaining the world's best minds), France's capacity to benefit the business sector via technology transfer leaves much room for improvement.

#### Paradoxical social relations in the workplace

According to multiple European studies (ISSP<sup>22</sup> and EVS<sup>23</sup>), French people have an atypical viewpoint on work. They stand out for the importance attached to intrinsic interest in employment<sup>24</sup>, but these expectations are partially unmet and 65% would prefer work to have less importance in their lives<sup>25</sup>. High unemployment, poor working conditions and the unsatisfactory quality of social relations explain this French singularity. French workers are the most likely to feel that their work is always, or often, stressful.

In an international perspective, social relations in France also appear paradoxical, as there is a significant gap between the degree of institutionalisation of social dialogue, the reality of practices, and the perception that employees and management have about it. France retains the image of a country marked by a highly conflictual workplace, even as statistics on strikes have decreased tendentiously, and the forms of conflicts have diversified and stabilised throughout the 2000s.

The highly institutionalised social dialogue, with its rather "egalitarian" facade, masks strong disparities in collective employee representation and intensity of social dialogue: between categories of employees; between sectors; between small, medium and large enterprises; between globalised groups and independent businesses. Above all, the institutionalisation of the social dialogue conceals its qualitative weaknesses and the difficulties faced by the trades unions to collectively regulate employees' working conditions, support their career transitions and anticipate companies' economic transformations.

### A system for both initial and continuing education that locks in professional destinies

The duality of the labour market and poor social relations within companies engender risks: lack of job security for the less-skilled, who are subject to multiple disadvantages in access to the labour market and continuing education, but who are better able to secure their career transitions; reduced opportunities for social advancement as a repercussion of the ongoing plight of workers with poor job security and few skills; the risk of growing inequality between those with training and those without it on the one hand, and between the different levels of training on the other.

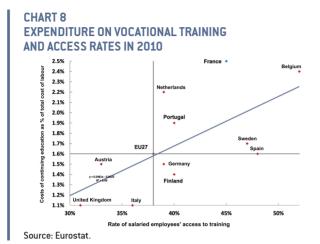
The observed decline in investment for continuing education is an impediment to meeting the challenges of the knowledge society. Moreover, that training often does not provide sufficient qualifications, and is overly focused on adapting short-term productivity. France's favourable ranking within Europe in terms of access to continuing education is offset by its high cost and low efficiency (Chart 8).

<sup>21.</sup> Cornell University, INSEAD, WIPO (2013), The Global Innovation Index 2013: The Local Dynamics of Innovation, Geneva, Ithaca and Fontainebleau.

<sup>22.</sup> International Social Survey Programme surveys, 1997 and 2005.

<sup>23.</sup> The European Value Studies (EVS) ask very general questions about values, in particular concerning the workplace, family and religion.

<sup>24.</sup> According to the ISSP, nearly 65% of the population considered that aspect "very important" in 2005. This proportion is lower in most other European countries. 25. According to the 2005 EVS.



More generally, the training system in France is oriented by the notion that every training programme feeds into a specific field or occupation, and that every field of activity should have its own training. This impedes the retraining of employees. The acquired skills, too closely associated with a specific field or occupation, therefore strongly limit professional mobility and thus the advancement of individuals on the social scale; other training systems, more focused on the dissemination of transversal skills - led by Germany<sup>26</sup> and the UK – promote social mobility. In this regard, economies characterised by market flexibility rely more on general skills, transferable from one sector to another, where other economies seek specific skills, particularly in the industrial sectors.<sup>27</sup> Thus, the German production model is built on a system of initial training regularly applauded for its efficiency in terms of placing young people in employment and, more broadly, for its dominant role in the fluidity of the relationship between education and employment.

#### Policies to find productive combinations

Public policy should target better cooperation between players, and in particular between public and private research, and between businesses and their subcontractors. Moreover, collaboration between companies can be improved by strengthening policy on competitiveness clusters. Finally, we must promote social dialogue within the company and increase the focus of vocational training on the least-skilled employees.

# PRINCIPAL ALTERNATIVES

#### WHAT POTENTIAL GROWTH AND UNDER WHICH CONDITIONS?

According to estimates by international organisations, for the next ten years, the "moderate" scenario for France predicts potential growth of approximately 1.5% per year (see Box), a decrease of 0.5% against the average growth before 2008. Given the uncertainty of the long-term effects of the crisis on the French production system, growth forecasts are particularly fragile and we cannot exclude a "black" scenario in which technical progress does not fuel growth in France as it did in the past. This pessimistic hypothesis of stagnant productivity is not unrealistic; it corresponds to the scenario of the Italian and Spanish economies since the mid-1990s. Under this hypothesis, the growth of the French economy would be automatically cut by 0.7% to 1.1% (see Box), thus falling into a range of 0.3% to 0.7%. This would pose serious problems regarding the sustainability of public finances.

Although a near-zero growth scenario is not the most likely one, growth of 1.5% per year is insufficient to address the French public's desire for higher living standards that are evenly distributed. One potential objective for the next 10 years could be a minimum of 2% annual growth (1.5% potential growth and 0.5% to make up the backlog that has accumulated). This would facilitate the sustainability of public finances and allow more leeway to adjust in the face of changes.

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<sup>26.</sup> In the context of training, standards are less limited to technical skills in Germany than in France. Transversal competences are therefore considered more valuable in the "model" country in terms of training.

<sup>27.</sup> See publications concerning the "Varieties of Capitalism" approach: P. Hall and D. Soskice D. (editors), Varieties of Capitalism: the Institutional Foundations of Comparative Advantage, Oxford, New York, Oxford University Press, 2001, and M. Busemeyer and C. Trampusch, The Political Economy of Collective Skill Formation, Oxford, New York, Oxford University Press, 2012.

However, the objective of growth at any price is not necessarily pertinent, and the quality of that growth, including its social and environmental sustainability, must be considered. One approach is to no longer think in terms of flows, but in terms of stock (with GDP no longer considered as the overall indicator of an economy), to meet the needs of present and future generations. Under this approach, the goal of growth becomes the preservation and development of social and environmental capital, which are seen as durable and inclusive, as defined by the Stieglitz-Sen-Fitoussi report, and more recently by the UN (2012).<sup>28</sup> This type of growth requires, in particular, affording top priority to the energy transition and to social cohesion.

Rather than contemplating an immediate break with the past, we can try to define the conditions for sustainable growth of approximately 2% and manipulate all the determinants of potential growth, while taking environmental and social objectives into account.

Regarding employment, several levers are available.

- An increased employment rate implies a simultaneous decline in the unemployment rate for all age groups and an increase in participation rates for those aged 55-65.
- Accelerated growth in the "quality" of labour can be achieved via improved initial training (this is also necessary in order to drastically reduce the number of students leaving the educational system without qualifications), a significant increase in the number of students graduating from higher education and more effective continuing education. However, improved qualifications do not result in potential growth unless they are accompanied by a modification of employment structures in favour of more highly-qualified positions, at the expense of less-qualified ones.

Regarding productive investment, the investment rate will only be maintained if corporate profitability is restored, particularly in the industrial sector. Beyond this core element, several factors could encourage investment.

- The availability of bank or market financing. In the past, real estate loans for households and businesses may have crowded out financing for productive investments. How can this be avoided in the future? Should disintermediation trends be supported, thus favouring business financing through the markets rather than bank credit? Does this choice have repercussions on corporate governance? How can we ensure that business creators find funding?
- The time horizon for business decisions. Business investment is favoured when businesses have a sufficiently long forecast horizon, in contrast with management and research practices focused on short-term profitability. Should we implement specific regulatory or fiscal tools to promote the lengthening of corporate planning horizons? What would be the effects of a more stable regulatory and fiscal environment for business (at both French and European levels)?

TFP is linked to industrial and organisational innovation within existing companies. Stronger business demography favours TPF: new businesses are sources of innovation and less-productive companies fail. It also benefits from good integration of the research system, from basic research to industrial applications, and is enhanced by the geographical organisation of industrial activities when it captures the positive effects of agglomeration. Each of these elements corresponds to choices and policies.

- Should we go further in supporting corporate research?
- Is it better to support research in all areas and concentrate resources on specific projects and sectors?
- What barriers to business creation should be removed? How can the legal framework for bankruptcy be improved?<sup>29</sup>
- Do we want to help large cities across the country reach the critical threshold where they can take advantage of agglomeration effects? And what are the implications for administrative organisation within large urban areas?

28. UNU-IHDP and UNEP (2012), Inclusive Wealth Report 2012. Measuring Progress toward Sustainability, Bonn.

<sup>29.</sup> D. Thesmar, G. Plantin and J. Tirole (2013), "Les enjeux économiques du droit des faillites (The economics of bankruptcy law)", Les Notes du Conseil d'analyse économique, n° 7, juin.

#### WHAT PRODUCTION DYNAMICS?

#### Who should own businesses?

The German *Mittelstand* model for family-run or owned businesses has been envied in recent years for its ability to export and to effectively manage the crisis, although other more structural factors can be invoked to explain the resilience of German companies. This model is characterised by the stability of reference shareholders, relatively well-protected from hostile bids. Yet, fifteen years earlier, people were praising the merits of populist capitalism with small shareholders, where employees also hold shares in the production facilities. The collapse of pension fund values during the crisis has cast doubt on this model where risk-sharing and value added were perhaps not in proper balance.

Each model can be favoured by way of fiscal choices. The family-owned business model can be supported via tax policies on inheritance, popular capitalism by tax policies on share ownership. The two models correspond to a culture that already has a certain presence in France.

They can certainly coexist, for example by favouring the family business model for smaller companies and popular capitalism for larger ones. But if we want the two models to work together, the tax instruments available to the State must be used consistently in view of this choice.

The type of company ownership affects methods of external financing. In an overly simplified view, family businesses rely on bank financing, while companies whose shares are more diluted have easier access to market financing, including debt.

### What type of decision-making should be used within the company?

Because human capital is essential to the vitality of enterprises, some opt for modes of governance that include other stakeholders in the company. For example, this is the case with German companies that favour modes of governance based on the co-decision principle, which includes a set of stakeholders (internal, such as employee representatives and external, such as suppliers and local authorities). This mode of governance can constitute a strategic asset, allowing improved anticipation of human capital needs based on forward-looking industrial strategies.

Conversely, some companies prefer less employee presence in corporate governance to promote responsiveness, an advantage in sectors with rapid innovation. They recruit (and dismiss) the employees they need on the external labour market, without necessarily favouring a long-term company-employee relationship. This also provides greater flexibility for the companies, and sometimes for the most qualified employees, who can make companies compete to hire them.

### What organisation should product markets have?

Sectors currently subject to international competition, primarily industry, agriculture and some segments of the services sector, have low margins, while much of the services sector has not been affected, and has maintained or even increased its margins. One consequence is that the price of input services for industrial enterprises grew faster than other prices in the economy. Moreover, the forthcoming broadening of the range of tradable services (see *below*) will increase the competitive pressure on the services sector. In anticipation of this change, is it advisable to begin preparing the services sector today to face more future competition?

#### The life and death of enterprises

The productive fabric's vitality is measured by its ability to produce innovative new companies and eliminate the least efficient ones. How can we ensure the optimal reallocation of labour and capital, particularly regarding employees? The functioning of the labour market and of social protection play a central role. How can we adapt these elements to ensure business renewal and support employee mobility while protecting them from the risk of losing income? Beyond the labour market, the creation, growth and cessation of enterprises depends on the organisation of corporate bankruptcies and modes of financing. What levers could increase the efficiency of the labour market and the life stages of companies (including those who go bankrupt) to ensure that productive resources are efficiently allocated and reallocated?

# WHAT INSTITUTIONS IN THE LABOUR MARKET?

Technical changes will give rise to significant workforce reallocations. Institutions regulating labour relations, both individual and collective, must simultaneously facilitate these reallocations, avoid segmentation in terms of access to stable employment, and promote secure upward mobility throughout the career path. This involves an overhaul of labour law (e.g. what rights are associated with employment contracts under various forms of employment or mobility?) as well as its relationship with other sources of regulation (collective bargaining, *soft law*, Community law).

The labour market's institutions must be consistent with the production model's organisation. The choice between an industrial *or* services orientation, or between a major corporation-national champions economy *and* SMEs-ISEs requires adequate regulations: employees' internal and external mobility differ under these models, as do as the mechanisms and levels concerned by social dialogue (enterprise, industry, sector). Similarly, the role that labour market institutions must play differs depending on whether the innovation is radical or incremental in nature. In the case of radical innovation, the allocative role of institutions is crucial for sectors with high potential.

# WHAT STRATEGY FOR INTERNATIONAL PRESENCE?

How should France be present in world trade? Other countries, such as Germany and the UK, have come to a decision on this, while France has not. These two countries are contrasting examples of international presence.

Germany has integrated itself into the world value-added chain via a powerful manufacturing industry. It delocalised segments with lowest added value in the production process and it focuses its efforts on high value-added segments. Germany has a positive trade balance due to a net exportation of goods, which more than offsets a net importation of services.

The United Kingdom has adopted a strategy focused on tradable services. While its trade balance remains negative, the services sector has a huge trade surplus compared to that of France. For example, in 2012, the services sector showed a surplus of 4.5% of GDP, against a surplus of 0.9% for France. The UK also endeavours to attract talent and capital from around the world, as does the US.

Could France follow a German-style strategy?

Services, representing 60% of overall economic activity, but only 20% of world trade, are expected to grow intensively and extensively. The EU and the US entered into trade negotiations on services in order to promote tradable ones, paving the way for extensive growth. At the same time, emerging countries are closing the economic gap, as well as the gap in standards for consumer services, as already evidenced by trends in their imports of services.<sup>30</sup>

Is the solution to gamble on knowledge-intensive services, where France seems to have an advantage?

<sup>30.</sup> Imports of services in 2012 increased 2% to 3% in developed countries against 8% in emerging countries.

Meanwhile, certain services are growing in symbiosis with industry. Consumers are demanding comprehensive solutions and tailor-made industrial products that incorporate a growing proportion of services.

Should we choose to orient our model of international presence towards services or goods, or should we deliberately opt for a hybrid model fundamentally focused on the sub-sectors with the highest productivity gains? Ultimately, in both the industrial and services sectors, aren't innovation and creativity the central challenges?



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At the governmental seminar held on August 19, 2013, the Head of State wished to begin, without waiting, a widely-concerted process relying on joint efforts to elaborate a 10-year strategy for France.

The definition of such a strategy includes several objectives:

- Establish a path that permits the country to move forward with points of reference and indicators clearly identified.
- Engage in collective choices that regulate the major transitions.
- Adapt policies and instruments according to the objectives set.
- Initiate an extensive dialogue with everyone concerned.

At the end of the seminar, the Prime Minister entrusted the *Commissariat* général à la stratégie et à la prospective (CGSP) with the preparation of this project, identifying notably five major issues: the future of the production model, the reform of the social model, the sustainability of the growth model, the transformations occurring in the French society and the European project.

The CGSP report will be handed over to the Head of State and the Prime Minister at the end of 2013. In particular, this report will have the goals of:

- Clarifying a certain number of prospects for the next ten years through a prospective assessment based on the most common findings.
- Proposing among possible choices a limited number of national priorities.
- Setting concrete and quantitative objectives concerning these priorities in order to mobilise the relevant stakeholders and the society as a whole, beyond a single Parliament's term.

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"Which Production Model?" - September 2013 - is a publication of the Commissariat général à la stratégie et à la prospective Editor:

Jean Pisani-Ferry, Commissioner-general for policy planning Managing Editor: Hervé Monange, Assistant to the Commissioner-General Printing: CGSP Dépôt légal: September 2013 - ISSN no.: 1760-5733

Press: Jean-Michel Roullé, Communication officer +33 (0)1 42 75 61 37 / 06 46 55 38 38 jean-michel.roulle@strategie.gouv.fr Created by decree on April 22, 2013 the *Commissariat général* à *la* stratégie et à *la* prospective (CGSP) replaced the *Centre d'analyse stratégique*. A place of dialogue and discussion, the CGSP assists the government in determining the main directions for the future of the Nation and the medium and long term objectives for its economic, social, cultural and environmental development. It contributes, moreover, to the preparation of governmental reforms.



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