

On the search to “recapture the industrial spirit of capitalism”: From patient shareholders to shared governance

By [Jean-Luc Gaffard](#) and Maurizio Iacopetta

The government, buoyed by the law to recapture the real economy, [the Florange act](#), which establishes the possibility of double voting for patient shareholders (who have held their shares at least two years), has just taken two significant decisions by temporarily increasing its holdings in the capital of Renault and Air France in order to ensure that in a general shareholders meeting the double voting option is not rejected by the qualified majority authorized under the law. The objective spelled out by France’s Minister of the Economy in [Le Monde](#) is to help “recapture the industrial spirit of capitalism” by favouring long-term commitments in order to promote investment that will foster solid growth.

Under the impulse of the Florange law, that has recently introduced the institute of the double voting for ‘patient’ shareholders (shareholders who have held their company’s shares for at least two years), the government has taken the important decision of increasing temporarily its equity shares into two major French companies: Renault and Air France.

The increased government’s stake into the two companies aims at preventing attempts of the shareholders general assembly to block the adoption of the double voting institute, which would require the approval of a qualified majority. The France’s Minister of the Economy explained in [Le Monde](#) that the

government's action is intended to help "revive the industrial spirit of capitalism" by favouring long-term commitments that promote investments and foster robust growth.

This initiative has led to renewed discussions about the governance of joint-stock companies and corporations (Pollin, 2004, 2006), to consider the problems that afflict them, possible remedies, and what one could expect from the government.

Because corporations have the ability to attract abundant savings and because of their power in choosing where to direct these savings, they are undeniably at the heart of the investment process. They can be governed in various ways, depending on the institutional contexts, which are related in turn to significant differences in productivity and growth (Bloom and Van Reenen, 2010 ; De Nicolo', Laeven and Ueda, 2008 ; La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2000). So the question arises as to which governance model is best able to promote entrepreneurial activity and innovation, and thus ultimately to ensure growth ([OECD 2012](#)).

There is evidence that the big corporations do not suffer from a lack of long-term financing. The development of the stock and bond markets since the 1980s has allowed corporations to reduce their dependence on bank financing and its cyclical character. Investment problems thus mainly reflect major breakdowns in the governance of companies, whether large, medium or small, as well as in the governance of financial institutions ([Giovannini et al., 2015](#)).

Traditionally, the focus has been on the ways controlling shareholders' choose managers, *i.e.* the conditions under which the capital owners get the yield on their investment that is justified by their special position as residual claimant (Shleifer and Vishny, 1997). But this ignores that other company stakeholders (creditors, employees, suppliers or even customers) also incur risk, and that the long-term performance

of the company depends on the conditions in which the shareholders' engagement controls the commitment of the other stakeholders (Mayer, 2013). It is not certain, in this regard, that the distribution of voting rights between different classes of shareholders is decisive.

Control and engagement

The central issue is how capital owners affect management's decision-making. Thus, the goals and values of family businesses reflect the interests and inclinations of the family owners, which can become inconsistent with productive efficiency, especially with the rise of rentier capitalism, when it is no longer the founders who are at the head of the company but their heirs or, more surreptitiously, a self-perpetuating caste (Philippon, 2007). While there is a positive relationship between the wealth of self-made millionaires and GDP and growth, the relationship to GDP turns negative when this concerns the wealth of millionaire heirs (Morck, Stangeland, and Yeung 2000). Faced with this potential problem, the existence of dispersed ownership would seem to be beneficial in so far as it replaces special interests with what can be likened to a collective interest.

This vision of the corporation nevertheless faces an objection formulated by Berle and Means (1932), who view the separation between ownership and control as a source of inefficiency. It creates problems of agency, meaning that the managers are likely to act in their own interests rather than in those of the shareholders, just like families or owning castes. Empirically, the Tobin's Q (the ratio of capital's market value to its replacement cost) increases, then decreases before increasing again as the power of the managers grows (Morck *et al.*, 1988). It is then possible that shareholders have less incentive to subscribe new shares or keep the ones they hold, resulting in lower share prices and less access by companies to external financing. The provisions that make it possible to protect large enterprises can have the effect of

hindering the market entry of new businesses and introducing significant distortions into the investment decision-making of established firms (Iacopetta, Minetti and Peretto, 2015).

Solving these problems requires creating institutional arrangements to ensure that shareholders become active in corporate management.

These arrangements have involved improving the quality of audits, of risk management and of communications between the company and its shareholders. They have led to greater transparency in executive compensation policy and linking pay to performance. This process has spurred the development of "markets for corporate control" and for shareholder activism, and indeed of a particular class of shareholders consisting of investment funds, including pension funds, whose management methods (the delegation of investment decisions to fund managers) emphasizes the immediate performance of their portfolios.

In the light of the financial crisis, these arrangements seem questionable to say the least (Giovannini et al., 2015). Financial institutions, although subject to the "best" governance rules ensuring genuine shareholder control, have been scenes of conflict between shareholders who have benefited from upside positive performance and creditors (and taxpayers) who have had to bear any losses. What was true of the financial institutions also held true for manufacturing companies, which have been arenas of conflict between shareholders and the other stakeholders (creditors, employees, suppliers and customers).

The real problem is that the while arrangements that were designed to solve agency problems have strengthened the control exercised by shareholders over company management, they have also reduced the shareholders' level of engagement (Mayer, 2013).

Notwithstanding their particular interests, family owners can ensure a stability and long-term engagement vis-à-vis other stakeholders that is not guaranteed by dispersed shareholding. The same is true of managers with delegated authority who have acquired sufficient independence vis-à-vis the shareholders to be open not only to their own interests but also to the interests of the employees (and sub-contractors). After all, the constitution of industrial empires is far from a bad thing so long as they are economically viable and do not violate the rules of competition. But the advantages conferred on managers are being offset by the development of markets for corporate control and shareholder activism, which has led to judging managerial effectiveness on the grounds of current performance. There is indeed a trade-off between the requirements of control and engagement. The problem is perhaps not so much to align the interests of managers with those of shareholders as to make shareholders responsible for what happens in the long run to the companies in which they invest.

The measure of engagement

The degree of commitment of financiers, lenders and shareholders is critical since it determines that of the other stakeholders in the company. It is reflected in the attitude chosen in response to fluctuations in performance, and more specifically in the degree of tolerance of poor business results. A low tolerance is a sign of a low degree of engagement, and usually a sign of hostile takeovers and pension fund activism.

It is also necessary to agree on the meaning of poor results. This could be the result of bad management, in which case investors' power to provide financing conditioned on management's ability to make the changes they require does not necessarily indicate a lesser degree of engagement. It may even prevent the financial crises that could result from serious agency problems – at least if consistent performance is the norm. But this is exactly not the case when the

relevant industrial activities have a cyclical dimension. Companies can deal with this by offsetting the results of several activities against each other provided that their cycles are different. But the attitude of investment funds is to emphasize the diversification of their portfolio on the valuation of the diversification of their activities by the companies themselves, prompting the latter to refocus on what is sometimes described as their core business. A series of dismantling operations, in particular, in the cases of Alstom, Alcatel and Thomson, constituted one of the reasons for the deindustrialization seen in France (Beffa, 2012).

Nor does the consistency of performance prevail when companies choose to innovate by introducing new products or new production techniques and exploring new markets. Because firms incur the costs long before increased in revenue, these are irrevocable costs, that is to say, whose recovery is contingent on the success of the decision to innovate ("sunk costs"). Any form of governance that would have the effect of favouring immediate results and eliminating tolerance of a temporarily poor performance would then only hold back innovation by penalizing long-term investment. But this is exactly where the possibility of hostile takeovers and the activism of investment funds are leading.

The institutional prescriptions

The debate has thus been opened on the ins and outs of the conflict between different classes of shareholders established in relation to the volume of securities held and the length they are held (Samama and Bolton, 2012). Many companies have adopted mechanisms that financially reward shareholders' loyalty or that grant them additional voting rights in return for this loyalty. Some countries (France and Italy in particular) have legislated in this regard. It is difficult to assess the results. In theory, the principle of "one share – one vote" does not rule out the existence of several classes of shares involving different voting rights. It does of course

reduce the agency problems involving the holders of blocs of shares, but it also reduces the beneficial effects of the stability that these blocs provide (Burkart and Lee, 2008). Moreover, empirical studies reach mixed conclusions, further indicating the complexity of the problem (Adams and Ferreira, 2008).

Nevertheless, numerous empirical studies do confirm that companies that have a more stable ownership structure and meet performance indicators that do not refer merely to financial capital have better outcomes in the long run (Clark et al., 2014). The existence of stable shareholder blocs or of restrictions on voting rights may be mechanisms that are likely to ensure this sustainability and strengthen the degree of commitment made by the capital providers, thereby justifying that other stakeholders – employees, suppliers and customers – do likewise in turn.

The difficulty with mechanisms for restricting voting rights is that they do not allow shareholders to indicate the length of time that they want to keep their shares and to indicate their level of engagement (Mayer, 2013). In fact, those who intend to hold their shares only briefly (possibly milliseconds in case of high-frequency trading) have the same influence on managers' decisions as those who intend to keep their shares for many years. The first bear the consequences of their votes only momentarily, unlike the latter, but both have the same influence on current decision-making, which may affect the company's performance for a long time to come. Basically, establishing different classes of shares does not necessarily substitute for the constitution of a stable bloc of shareholders that is able to deal with hostile takeovers motivated by the quest for short-term capital gains.

Things may be different when past loyalty is rewarded financially by an increase in the dividends paid, since in this case selling the shares leads to losing the financial advantage acquired. There is therefore an incentive to hold

the shares even longer. Nevertheless, the payment of dividends is never equivalent to the retention of profits. The proceeds from new issues are under the control of the shareholders, whereas undistributed profits are still under the control of the managers. The higher the dividends, the more companies are dependent on their ability to draw on the stock market. There is still an issue of too much dependence vis-à-vis impatient shareholders, pulling companies towards short-term investments.

Accordingly, one potential relevant mechanism might be to establish voting rights based not on the time the shares have been held, but on the future period to which the shareholders are committed (Mayer, 2013). Under this proposal, shareholders would be able to register the period for which they intend to hold their shares and to be paid in the form of votes that are set according to the length of time remaining before they are able to dispose of them. At the moment, “loyalty and the double vote of the shares remunerate shareholders for the period the shares have been held and, consequently, fail to make them more responsible for the future consequences of their decisions. Really, since shareholders who have held their shares a long time are more likely to sell them, this potentially rewards a lack of commitment” (Mayer, 2013, pp. 208-9). It is clear, however, that it would be difficult to implement this institutional arrangement in practice, not least due to its credibility, and it would be preferable to explore other forms of governance that involve other stakeholders in the decision-making process.

On the expectations of government

In light of the analysis above, the question arises of what the government can expect from its decision to impose double voting rights. The answer is that this could be mainly to reduce, even if in a limited way, the public debt, without losing its influence in the companies in which it holds shares. The intention to revive industrial capitalism by this

measure, laudable as this may be, is unlikely to have any real impact. This is true in particular because there is nothing to suggest that in the future the State would behave differently from any other shareholder, despite double voting rights, and could impose or contribute to imposing management decisions that are not necessarily in the long-term interest of the companies and their stakeholders.

Also, without wishing to neglect what the existence of several classes of action could mean for making decisions about business strategy, including possibly introducing protection against hostile takeovers, it seems a more fundamental measure would be to revise the business model as a whole.

The degree of engagement of the capital providers commands the commitment of the other stakeholders. Intermediated financing is the primary source of funds for owners who want to keep control of their business. It enables companies to innovate and grow without the need to dilute ownership. But it is necessary for such financing to exist, i.e. for banks to commit over a long term to these companies. Yet banks too are afflicted with problems of governance, leading to a conflict between the two main types of investors, shareholders and creditors (Giovannini et al., 2015). If institutional progress is to take place, it should therefore concern the financial system and be based on a return of intermediation (Pollin 2006). And if action is to be taken on the conditions of governance of the corporations themselves, this should be based on the proposals by Mayer (2013): perhaps, subject to feasibility, by instituting voting rights in proportion to the time for which shares are held in the future, but especially by establishing "boards of trustees" that set broad guidelines, acting as the guardians of values common to the various stakeholders (shareholders, creditors, employees and even suppliers and customers) instead of acting merely as representatives of the shareholders. These common values do nothing more than express the recognition of the strategic

complementarities that exist between all the actors who are the source of value creation.

Bibliography

Adams, R. and D. Ferreira (2008), "One Share-One Vote: The Empirical Evidence", *Review of Finance* 12, 51-91.

Beffa J-L (2012), *La France doit choisir*, Paris: Le Seuil.

Berle A. and G.C. Means (1932), *The Modern Corporation and Private Property*, New York: Harcourt, Brace & World, Inc.

Bloom, N. and J. Van Reenen (2010), "Why Do Management Practices Differ across Firms and Countries?", *Journal of Economic Perspectives* 24, 203-24.

Bolton, P. and F. Samama (2012), "L-Shares: Rewarding Long-Term Investors", *ECGI Working Paper*, No. 342/2013.

Burkart M. and S. Lee (2008), "One Share-One Vote: The Theory", *Review of Finance* 12, 1-49.

Clark, G., A. Feiner and M. Viehs (2014), 'From the Stockholder to the Stakeholder', *Smith School of Enterprise and the Environment*, Working Paper.

De Nicolò, G., L. Laeven and K. Ueda (2008), "Corporate Governance Quality: Trends and Real Effects", *Journal of Financial Intermediation* 17, 198-228.

Giovannini A., Mayer C., Micossi S., Di Noia C., Onado M., Pagano M. and A. Polo (2015), "Restarting European Long-Term Investment Finance. A green paper discussion document", CEPR Press. <http://reltif.cepr.org/restarting-european-long-term-investment-finance>

Iacopetta, M., R. Minetti and P. F. Peretto (2014), "Financial Markets, Industry Dynamics, and Growth", *Duke University*

Working Paper Series (ERID), 172.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny (2000), "Investor Protection and Corporate Governance", *Journal of Financial Economics* 58, 3-27.

Mayer C. (2013), *Firm Commitment*, Oxford: Oxford University Press.

Morck, R., A. Shleifer and R. Vishny (1988), "Management Ownership and Market Valuation: An empirical analysis", *Journal of Financial Economics* 20: 293-315.

Morck R., Stangeland D. and B. Yeung (2000), "Inherited Wealth, Corporate Control, and Economic Growth", in R. Morck ed., *Concentrated Corporate Ownership*, Chicago: University of Chicago Press.

OECD (2012), *Corporate Governance, Value Creation and Growth. The Bridge between Finance and Enterprise*, OECD, Paris. <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/50242938.pdf>).

Philippon T. (2007), *Le capitalisme d'héritiers: la crise du travail en France*, Paris: Le Seuil.

Pollin J-P (2004), "A propos de quelques ouvrages sur la gouvernance des entreprises", *Revue Economique* 55 (2): 333-346.

Pollin J-P (2006), "Essais sur la Gouvernance HAL Archives ouvertes", <https://halshs.archives-ouvertes.fr/halshs-00081933>

Shleifer A. and R. Vishny (1997), "A Survey on Corporate Finance", *Journal of Finance* 52 (2): 737-783.

Jean Tirole – an outstanding economist

By [Jean-Luc Gaffard](#)

Jean Tirole, this year's winner of the Bank of Sweden's Prize in Economic Sciences in Memory of Alfred Nobel, is an exceptional economist. This is reflected in the academic quality of his published works, both in the discipline's major journals and in books where he builds on his own research to engage with the major issues facing economics in the field of industry, regulation and finance. It is also reflected in his clear determination to address genuine issues that are important to an understanding of the functioning of market economies and in his concrete proposals for public policy to deal with this. It is also reflected in the way he explores these issues through developing powerful new analytical tools. And finally, it is reflected in the modesty of the judgments he renders on his results and their practical implications, a modesty befitting a true scientist.

It is fashionable in some circles to pigeonhole economists in one category or another, usually to stigmatize them. Jean Tirole is no exception to this parlor game. Detractors of the field of microeconomics, which focuses on company strategies, would have him more accustomed to frequenting the media than his research desk, and to be a defender of theses that could be termed free market if not ultra-liberal, more or less a sycophant of the markets and a fighter against government action. Nothing could be further from the truth.

Jean Tirole explores the functioning of markets populated by companies that are seeking to exploit their market power to mislead regulators whose choices are affected by a lack of information and by the existence of specific political constraints. He deals seriously with the fact that information

is incomplete, that market situations and behaviors are imperfect, and that rational bubbles might even arise. If in the face of the crisis, everyone is now calling for stimulating R&D, developing vocational training, and expanding public investment, everyone should also be aware that the results are subject to the prevailing forms of organization, which are subtle and varied mixtures of competition and cooperation at the heart of the contracts between private and public actors on the various markets. This is what the work of Jean Tirole has drawn to our attention, along with the discussion that is needed about methodology and the choice of tools and standards that government should use.

Jean Tirole and his friend and co-author Jean-Jacques Laffont, who died too young, with whom he would likely have shared the prize awarded to him today, set themselves the task of analyzing the relationships that link business and State in the key sectors of telecommunications, energy and transport, while trying to determine the conditions in which these are socially efficient. These two are worthy successors of a prestigious French tradition, that of the French “economic engineers” – including Clement Colson, Marcel Boiteux and Maurice Allais – who as both researchers and engineers worked to establish the place and role of government in the functioning of a market economy. It is a tradition of public economics that the two nevertheless revolutionized by showing, through the new tools they used, that protecting the public interest assumed an ability to understand the detailed functioning of markets that differ greatly from one another and at the same time the shortcomings of a state that is neither omniscient nor spontaneously benevolent. In doing this, they emphasized the complexity of situations and, consequently, the complexity of contractual rules – complexities that it would be illusory and dangerous to ignore. They were able to highlight the true nature of a market economy in which the State, far from replacing the market, helps it to function properly through targeted

interventions. In this respect, and in a domain that they made their own, that of analyzing companies and markets, they were part of a stream of social philosophy much like that developed by Keynes.

Does this mean that no criticism can be made of the work done? This is surely not the approach of the author himself, who knows that scientific progress grows out of controversy and debate so long as this is conducted according to fair play by researchers with proven expertise. The impossibility of setting out general rules is undoubtedly a weakness of an approach in industrial economics that Franklin Fisher (1991) [\[1\]](#) characterized as a theory that takes the form of examples and risks only producing taxonomies, which could mean that anything can happen, making it difficult to establish guidelines for public policy. This approach cannot dispense with the image of the heterogeneity that characterizes market economies, without which it is, in any event, vain to imagine effective public policy. Furthermore, many studies by Jean Tirole have the virtue of adjusting the specifications of the theoretical models to the particular configuration of the industries, businesses and technologies under study. Other approaches are undoubtedly possible, which would break with the hypothesis of agents practicing intertemporal optimization in a world of rational expectations. They would insist on the sequential nature of the choices made by trial and error in an uncoordinated economy, even in a state of bad equilibrium, due to the significance of innovation, which implies both the irreversibility of investment decisions and incomplete knowledge of the future configuration of the markets. Taking on board this aspect of industrial reality would mean recognizing that it is just as important to understand how firms acquire knowledge – incomplete knowledge at that – about the reactions of their competitors as it is to establish the impact of this. Following a line of thought that is rooted more in Marshall and Hayek than in Walras and Cournot, it would be possible to provide another perspective on the

functioning of market economies and the role of collusion and of networks, which could sometimes lead to different recommendations for public policy. It would also be necessary that the approaches chosen, which would be geared more toward the issue of coordination than of incentives, would have the robustness needed to enrich if not outright challenge established theory. This is what Jean-Jacques Laffont impressed on me during a long conversation we had while awaiting our respective flights that had been delayed by a strike – a situation not irrelevant to our discussion.

[1] See “Organizing Industrial Organization: Reflections on the Handbook of Industrial Organization”, *Brookings Papers on Economic Activity. Microeconomics*, vol. 1991 pp. 201-240.

How to read the Alstom case

By [Jean-Luc Gaffard](#)

The situation of Alstom has hit the headlines since the company executives announced their intention to sell the energy branch to General Electric and to carry out a restructuring that strongly resembles a unit sale. The government reacted strongly to what it saw as a *fait accompli*, seeking another buyer, namely Siemens, with a view to creating one or more European companies in a sector considered strategic, along the lines of Airbus – before it came round to the General Electric solution, which in the meantime had

improved in terms of both the amount paid for the buy-out and the arrangements for the future industrial organization. These events, important as they are, should not obscure the more general fact of ongoing deindustrialization, which is taking the form, among others, of the break-up of certain large companies, and which is resulting from inconsistencies in the governance of what French capitalism has become today.

Deindustrialization is generally attributed either to competition from countries with low wages, and thus to excessive labour costs, or to insufficient innovative investment, and thus to a lack of non-price competitiveness. The solutions sought in terms of public policy oscillate between reducing wage costs and supporting R&D, usually with little regard to the conditions of corporate governance. The emphasis is on the functioning of both the labour markets, with the aim of making them more flexible, and the financial markets, which are considered or hoped to be efficient, without really taking into account the true nature of the company. But a firm is part of a complex network of relationships between various stakeholders, including managers, employees, bankers, customers and suppliers. These relationships are not reducible to market relations encumbered with imperfections that generate poor incentives and that need to be corrected so as to ensure greater flexibility. They are part of more or less long-term contractual commitments between the various stakeholders in a company, which are exceptions to the state of pure competition, even though they are essential to the realization of the long-term investments that bring innovation and growth. The duration of these commitments is in fact the foundation for the average performance of the companies, the structuring of the industry and ultimately the industrialization of the economy.

Alstom's troubles, following on the heels of the difficulties encountered by other firms like Pechiney and Rhône Poulenc that are no longer on the scene, reflect this organizational

reality. With sales barely equal to one quarter of the figure for Siemens and one-fifth for General Electric, the size of the company and its various activities has been judged by its leaders to be largely insufficient to meet the demands of competition. With the agreement of the European Commission, the State already had to intervene back in 2004 to recapitalize the company so as to avoid bankruptcy. It then faced the obligation to hive off certain activities and cut jobs drastically. Today, the only way ahead is to carry out a new restructuring, with the hope of saving skills and jobs by integrating them into a larger, more efficient entity while absorbing the accumulated debts. This cannot take the appearance of a final break-up that benefits one or another of the competitors who managed to develop the right strategies, far from the recommendations of those who fawned over what was once called the new economy. In this case, the beneficiary will be General Electric. This ultimate solution is taking place due to Alstom's inability to benefit in the recent or earlier period from the longer-term financial commitments that would have allowed it to implement an effective growth strategy.

This disappointment, on the heels of numerous others, reveals the inconsistency that has befallen French capitalism between the organization of its industry and of its financial system, which was criticized back in 2012 in a book by Jean-Louis Beffa (*La France doit choisir*, Paris: Le Seuil). The new financial model, inspired by the Anglo-Saxon model, no longer seems to respond to the needs of mature enterprises engaged in activities with investment needs that are substantial and long term and which are subject both to performance cycles related to fluctuations in demand and to the constraints of the innovation process. The ensuing lack of commitment was bound to lead to break-ups, but it would be wrong to equate this to an increased modularity of industrial production resulting from the introduction of new information and communication technologies and which would be valued by the financial

markets, as the head of Alstom seemed to think in the late 1990s when advocating a company without factories.

Under these conditions, a recovery in production cannot take place through the invariably one-off specific interventions of the public authorities aimed more or less explicitly at creating national or European champions that are, after all, not very credible. What is needed are structural reforms to deal, not with the rules on market functioning, but with modes of governance, and in particular a revision of the way the financial system is organized.

These observations are developed in greater depth in [“Restructurations et désindustrialisation : une histoire française”, Note de l’OFCE, no. 43 of 30 June 2014.](#)

Why read Piketty?

By [Jean-Luc Gaffard](#)

Thomas Piketty’s book *Capital in the twenty-first century* has met with an extraordinary reception, one that is commensurate with both the empirical work performed and the political issue addressed, that is to say, the spectacular increase in inequality in the United States. Paul Krugman and Joseph Stiglitz, both of whom are concerned about current trends in American society that they consider are threatening democracy, believe Piketty’s work confirms their fears.

Armed with an impressive mass of data and a solid historical knowledge reinforced by a reading of the great novels of French and English literature, Piketty foresees the advent of

a second *Belle Epoque*, the decades-long period preceding the First World War. This would mean a return to a patrimonial capitalism based on inheritance, when income and capital are concentrated in the hands of the top percentile of the population and the ratio of capital to income rises significantly. More fundamentally, Piketty highlights the existence of a longstanding trend towards stagnation and rising inequality, which is reflected in a rate of return on capital that is sustainably higher than the economy's rate of growth, a little like Marx insisted on the existence of a tendency for the rate of profit to fall. The twentieth century, and in particular the period following the Second World War, was characterized by strong growth associated with decreases in inequality and in the importance of capital relative to income – but this period was merely a parenthesis that is now closed. The thesis defended is that capitalist society has returned to low growth and rising inequalities fuelled more by the transmission of wealth than by the remuneration of individual talent.

The book is nevertheless ambivalent. There is a gap between the wealth of data collected and the simplicity of the theory that is supposed to account for it. On the one hand, an overly simple, essentially a-institutional model adopts a growth rate that is ultimately exogenous and ignores the heterogeneity of capital, making distribution a technical given that does not feed back into growth. On the other hand, the wealth of the data and the insights associated with it encourage reflection about the ins and outs of the distribution of income and wealth, returning it to its central place in economic theory and restoring its social dimension.

A belief runs through the book: that, regardless of what economic policies are implemented, growth is again returning to a low level because there is no longer any catch-up going on and potential productivity gains are largely exhausted. Inheritance then begins to play a key role in the distribution

of wealth and feeds the rise of inequality. This fundamental pessimism justifies the simplicity claimed for the theoretical explanation. If this pessimism is to be shared, however, the foundation needs to be improved by examining the causes and effects in the formation of rent and by breaking with a neo-classical analysis of growth that is without any real relevance to the subject at hand. There is nothing natural about the evolution of the distribution of income and wealth, which depend on political choices and social norms. The question, then, is whether the choices and norms of the years of the *Belle Epoque* still have any meaning, and whether policy can still counteract the forces of what must be called decline that threaten modern capitalist societies.

Reading Piketty thus gives rise to an implicit challenge: to develop an analysis that, following an intuition that we owe to the classical economists, is based on the idea that the growing importance of rent, as distinguished from profit, would fuel an increase in the purchase of nonperforming assets or luxury goods at the expense of the accumulation of capital, and would thereby constitute an obstacle to growth.

These various issues are examined in the *Note de l'OFCE*, no. 40 of 2 June 2014, ["Le capital au XXI^e siècle : un défi pour l'analyse"](#) [*Capital in the twenty-first century : a challenge for analysis*], which follows on from the previously published working document by Guillaume Allègre and Xavier Timbeau (see the blog [here](#)).

The Barnier proposal on

banking regulation: whence the wrath?

By Jean-Paul Pollin (Université d'Orléans) and [Jean-Luc Gaffard](#)

This time the evidence is there and it's irrefutable: the reaction of the French "authorities" to the proposed [structural reform of Europe's banking sector](#) proves that their law on the so-called "separation of banking activities" was nothing but a false pretence, a ruse to head off the European Commission's initiatives in this field (see this [OFCE blog](#)). It was also an occasion for them to smoothly undercut the report by Bourget, whose most striking passage was the denunciation of finance as the "invisible enemy", followed by its promise to create distance between deposit banks and trading banks (finance and investment banks). At the time this declaration was well received – the innumerable eccentricities of deregulated finance were held, rightly, to be responsible for the "Great Recession" and it was considered necessary to prevent the predatory and destabilizing dynamics of the financial markets from returning to pollute the traditional activities of lending and managing means of payment, whose impact on the economy is significant and lasting.

But these ambitions were buried a few months later by legislation that separates almost nothing, as was agreed by the bankers themselves: virtually all trading activities thus remain closely linked to the commercial bank operations which serve to strengthen them. During the debate on this law, one of the arguments in defence of its feeble character was that our banking system should not be put at a disadvantage relative to the Anglo-American institutions. MPs, including [Karine Berger, the law's rapporteur](#), pretended to believe that to preserve the City the British government would never dare implement the recommendations of the Vickers report, which

advocated a strict separation of activities. It is curious to see now that the UK has actually legislated in the manner recommended, resisting the pressure of the financial lobbies, whereas the French government not only capitulated to the “invisible enemy” but now is battling against a less stringent proposal than that adopted across the Channel.

Thus the Minister of the Economy expressed his wrath (cf. [Le Monde of 30 January 2014](#) and [Le Monde of 5 February 2014](#)) at European Commissioner Michel Barnier, whose fault was to propose a text that intends to follow the conclusions of the Liikanen report and the recommendations of a report of the European Parliament approved by a large majority last July. But there is nothing shocking about this text: it merely prohibits trading for own account (directly, or indirectly through exposure to the entities doing this) and imposes the separation of trading activities (with the specific exception of transactions in government securities) in institutions for which these activities reach a certain absolute and / or relative size (as a percentage of assets). This should affect only some thirty European banks which, it is true, include the four largest French groups. In the end, France has become one of the most determined opponents of a reform that was the subject, less than two years ago, of one of the main campaign promises of the President-elect.

Equally shocking is the incongruous intervention of the Governor of the Bank of France, Mr. Noyer, who took it upon himself to label [Mr. Barnier's project as irresponsible](#) and assert that it ran counter to the interests of the European economy. It is rather improper to label the European Commissioner as irresponsible, when he has actually demonstrated a great deal of prudence in this matter. This criticism is also indirectly targeted at the Working Group chaired by the Governor of the Bank of Finland and composed of well-known figures (including Mr. Louis Gallois) who could be said, with due respect to Mr. Noyer, to be no less competent

or less familiar with the state of European interests than he is. In reality their report offers a serious analysis and thoughtful conclusions. It is an example of a well-documented work, clearly argued and non-partisan, which should be a source of inspiration for the administration, and in particular the Bank of France. Yet Mr. Barnier's recommendations largely reflect the proposals in this earlier report, while leaving even broader margins of appreciation to the supervisor about possibilities for the separation of the main trading activities, with the exception of own account trading. This should not displease Mr. Noyer.

Nor are there any grounds to claim that the Barnier proposal could undermine the financing of the European economies or otherwise damage them. Nobody can seriously believe that this financing can be performed efficiently only by universal banks – particularly since we took so much pleasure recently in recalling the importance of bank credit for the economies of continental Europe. What actually worries Mr. Noyer (as well as Mr. Mestrallet, the head of Paris Europlace) is the future of trading, and more specifically the potential role of the French banks. But the separation principle obviously does not imply the disappearance of the finance and investment banks. What Mr. Noyer needs to explain is why he believes that, to be competitive, the finance and investment banks should not be separated from commercial banking, including through subsidiarization:

- – Is it because this allows for possible economies of scale? The existence of synergies between the different types of activities is not proven, but even if it exists, then subsidiarization should preserve them. For example, information that is useful for financing trading or for bank loans to finance a company can easily circulate between the separate entities of a banking group. More generally, to market a range of services that customers consider complementary, there is

no need to produce these within the same entity.

- – Is it because the existence of cross-subsidies between activities helps to build a more profitable and more robust model? But this would mean that the strength of universal banking resides in the violation of the rules on competition. This is of course unacceptable, and it should not be forgotten that what defines efficiency is not that one or another product or service has a lower price, but that all these products and services have a “fair price”. The subsidizing of trading operations by commercial banks can lead to excessive risk-taking, with the reverse true as well. In this sense, if separation leads to a differentiation in ratings between group entities, this should benefit the commercial bank and therefore the cost of credit. On the other hand, it may be that this would increase the cost of market transactions and thus reduce the volume of transactions. But is it reasonable to manipulate the relative prices of financial services in order to stimulate activity on Europe’s financial markets?
- – Is it because the possibility of transferring cash or equity between activities also helps to make the bank more stable and reduce its operating costs? But in part this would be covered by what has just been raised about competition and efficiency, since this assumes that transfer prices would differ from market prices. Above all, it is likely to endanger the commercial bank when losses or liquidity problems occur on the markets. It would no longer be possible to guarantee the protection of lending or the management of payments. The decrease in the commercial banks’ equity could constrain the flow of credit, and the investment of deposits in market transactions could subject them to excessive risk.
- – Or finally is it because the constitution of banks that are “too big to fail” and / or “too interconnected

to be subject to an orderly resolution” would protect the national champions? But this would end up perpetuating the implicit subsidy that benefits these institutions – which once again poses the problem of distorting competition and encouraging the growth of these institutions, and hence the concentration of the industry, thus continuing to endanger the public finances. As for the entanglement of activities, this would prohibit the establishment of a credible resolution mechanism. In this sense the separation of activities is an essential complement to the provisions envisaged under the European Banking Union.

It is really important that this type of question be answered precisely and consistently, otherwise the French protests will remain ineffective because they will appear to be based solely on defence of the interests of the national financial lobbies, as if this would be worth the sacrifice of the efficiency and stability of the financial systems; this is not in the interests of Europe’s economies.

In fact, the many arguments from a variety of backgrounds (including the OECD Secretariat in 2009) in favour of separation have never been convincingly refuted. Without going into detail (*cf.* [OFCE Note no. 36/November 2013](#)), it seems that separation is the best if not the only solution to the problems to be solved: to protect commercial banking activities, which have the character of a public service; to avoid distortions of competition; to control systemic risk; to ensure the efficient governance and management of the large banking groups in a transparent manner; and to provide for a possible orderly “resolution” –all of which generally corresponds to the explicit list of the Barnier proposal’s objectives.

While awaiting these explanations, the remarks by the Minister of the Economy and the Governor of the Bank of France only reinforce suspicions of the possible complicity in our country

between the banking sector and part of the high public financial administration. It also demonstrates how the argument often heard in France that what is needed is to focus on supervision rather than regulation is full of ulterior motives and devoid of all credibility. Even if the supervision of the large banks must now be entrusted to the European Central Bank, it is evident that some work will still be carried out at the national level. And following the declarations by the Governor of the Bank of France, who is also President of the ACPR, France's Prudential Control and Resolution Authority, who can seriously believe that the supervision of our institutions will be carried out with the rigor and independence needed?

The sources of an industrial renewal

By [Jean-Luc Gaffard](#)

French companies in many sectors have had to deal with a relative increase in unit labour costs, a relative decline in the price of value added, and lower margin rates, meaning that many of them are facing strong competition and are relatively uncompetitive on price due to not having innovated and invested enough in the past. The result over the last decade has been a significant loss of substance in France's industrial network and a worsening foreign trade deficit. The challenge of carrying out an industrial renewal is clearly posed. This is not limited simply to manufacturing but encompasses any activity that is likely to deal with demand on

a relatively large scale and is organized on an industrial basis[1].

It is common sense to assume that the solution lies in the renewed capacity of these companies to innovate, to export and quite simply to expand, or in a word, in the ability to regain or acquire the non-price or structural competitiveness that they are currently lacking. The difficulty they face is that their lack of price competitiveness is leading them to seek immediate reductions in cost to the detriment of investment in innovation. Faced with this difficulty, economic policy makers must resolve a real dilemma: either to take measures to compete on taxation, social contributions, or even wages in an effort to restore companies' price competitiveness at the risk of further weakening aggregate demand and ultimately negatively impacting their turnover, or to keep the existing system of taxation at the risk of depriving these companies of the means to invest and innovate.

The consensus of the day naturally denies the existence of such a dilemma. The presumed neutrality of money and the budget, coupled with the flexibility of the markets for goods and labour, is supposed to help the economy back on the path of steady, stable growth. Businesses, now reassured by the restoration of balanced public accounts and freed of excessive regulatory constraint, are again free to invest.

This consensus embodies a reductive vision of the functioning of market economies. The model of perfect competition, which is the standard in this instance, pictures a world where companies respond simply to price signals sent by the markets for goods and by factors whose operation is immunized against any power exercised by one or another protagonist in these markets. Somehow or other, this is what is meant by the assumption of efficient financial markets whose function is to discipline firms and States. The reality is very different. Markets are naturally and necessarily imperfect. Companies develop strategies on pricing, production and investment that

deal with this market environment at the same time that they help to shape it. It is important to recognize this reality before trying to define economic policies suited to it.

The sources of business competitiveness

In an industrial market economy, business growth comes from *innovation*, in other words from companies' ability to develop non-price or structural competitiveness that is more robust and more lasting than just price competitiveness. Technological or organizational innovation aimed at the creation of new products or services or at the exploration of new markets entails however a *detour away from production*. Time is needed to develop a new production capacity before using it and benefiting from it.

Generally, this new capacity has a higher construction cost than the cost of simply replacing existing capacity. Additional costs must be borne before the corresponding additional income can be collected. A loss of competitiveness, in principle temporary, is apparent. This could be reflected in increases in current prices (of old products) if the hike in costs is to be passed on immediately or, more likely, by a reduction in margins. The performance of the production of existing goods or services is thus negatively affected by the decision to innovate [\[2\]](#).

In this context, it is still necessary for the company to remain competitive on prices in the short term in order not to lose significant market share to its competitors. It is in regard to this immediate requirement that the issue of *labour costs* comes up. This is a particular issue in the euro zone where in the absence of possible adjustments via exchange rates, legal and regulatory differences on social and fiscal matters create real distortions in competition – and when, furthermore, the international fragmentation of production (in reality the relocation of segments of production to countries where wages are lower but qualifications identical) is

providing businesses that have the ability or opportunity to exploit this an advantage in terms of the costs passed on in product prices, margins and investment volumes.

Maintaining or regaining immediate price competitiveness will not, however, suffice. It is still necessary to encourage companies to innovate. But when investments, including intangible investments, are irreversible and when information on the future configuration of the market is not immediately available, it is difficult for companies to do this. They cannot base their decisions on price signals alone. They must be able to secure their investments by acquiring sufficient knowledge about the future market, that is to say, not only the size of demand, but also about competing and complementary offers. The point is to ensure that competing investments do not exceed a certain threshold and that complementary investments attain a certain threshold. This is possible only thanks to practices that have to be considered monopolistic, which are related to different forms of connections between the companies concerned[3]. This kind of *organizational strategy* foregrounds, not a particular company, but a *network of companies*, a sort of ecosystem that often brings together a local dimension and capacity to project outwards. The characteristic of these networks is to balance competition and cooperation. Practices that can be characterized as market imperfections here become incentives to innovate. They help to define the *boundaries* of the firm best suited to the decision to innovate.

What is true of investment in physical capital is equally important for investment in human capital. This investment has a gestation period that essentially amounts to the learning time. This is an essential element in developing new productive capacities. Its products must be secured. The labour relationships specific to a company and to the networks of firms between companies contribute to this. The *stability* of the employment relationship, which binds the employee to

the company, is a decisive factor in the learning and retention of professional experience. The *mobility* of employees between companies is another factor. This mobility enables each company to draw on what an employee has learned in another company developing the same sort of skills. It is also a source of increases in wages, but it becomes possible only if companies are in a situation of monopolistic competition.

The difficulty of innovating even when investments are irreversible and market information is incomplete requires having access to financing in order not only to bridge the gap between the profile of costs and the profile of revenue, but especially to have a lengthy financial commitment, that is to say, stable financial relations or control of the capital. The problem most innovative firms encounter is that the assets created are not easily re-deployable (including intangible assets). This constraint, which justifies developing the organizational means to acquire credible information about the market, requires at the same time being able to enjoy continuing financial support.

Goals and means of an industrial renewal policy

Identifying in this way the stimulants of business growth should guide the policies to be implemented, which are reducible neither to competition policy nor to industrial policy. These policies concern the operation of various markets (goods markets, labour markets, credit markets and financial markets). They make use of a variety of instruments and are situated at different geographical levels.

Industrial policy should set itself the goal of stimulating *cooperation* between companies, including competing firms, and, more broadly, of contributing to the formation of ecosystems involving companies, banks and research institutions. The

point here is not at all to designate products or technologies or even territories to promote *a priori*, but instead to help foster market conditions that encourage companies to invest in the ways that seem most promising. The criteria adopted for subsidies or tax relief should meet this objective, which is obviously more complex than that recently put forward of targeting sectors where competition is strong [4]. This should be the specific objective of funding for France's "competitiveness clusters", as well as of other forms of public assistance.

Industrial policy has a *regional dimension*, since companies have a tendency to group together to benefit from external effects, in particular learning synergies not only with regard to technological knowledge but also to knowledge of the market. This phenomenon is in line with the willingness of local authorities to assist in the creation of clusters. However, there is no evidence that these local authorities have the information they need or that they can avoid being captured by lobbies. Competition between them can be expensive when it involves tax competition, which can probably improve the situation of some but only at the expense of others, and which negatively affects overall performance. This inevitably raises the issue of the competence, number and size of the local authorities.

Competition policy is not a substitute for industrial policy. It must pursue the same objective, *i.e.* to *distinguish between competition and cooperation*. From this perspective, the role that competition policy should play is to punish imperfections and distortions that are harmful to innovation and validate those that foster it. The handling of cooperation agreements in R&D is indicative of this requirement. It cannot be exclusive. Other types of agreement must be able to escape the common law on competition.

Labour market policy must set itself the goal of strengthening the ways and means of *enhancing skills*. First and foremost,

this means creating the conditions for stabilizing the employment relationship, which is a source of learning for employees and of making sure that companies retain the skills acquired. These conditions are undoubtedly covered by the employment contract itself, but they are also inseparable from the constitution of the communities or clusters making up innovative business networks. These networks are "local" labour markets in which labour mobility between firms is potentially beneficial to all the partners with respect to mastering new skills. Moreover, an end needs to be put to incentives that contribute to perpetuating the privileging of low-skilled or unskilled jobs. Finally, legal and regulatory conditions that permit businesses to hold onto jobs in the event of temporary difficulties (*i.e.* the use of short-time working) should be strengthened.

Banking policy should set itself the goal of creating *stable relationships between companies and financial institutions*. So-called relationship banks, which collect information on borrowers, have higher costs than traditional banks, but they also have the advantage of providing resources to businesses facing liquidity problems linked to the characteristics of the innovation cycle. In fact traditional intermediation increases the growth rate of the economy and reduces its long-term volatility, as opposed to market-based funding[\[5\]](#). It is also important to refocus the financial system on traditional intermediation, especially on business credit, and to return to a form of separation between the two types of activity, so that lending to business avoids the consequences of the inevitable vagaries of market activity[\[6\]](#).

Fiscal policy must set itself a dual objective. The short-term goal is to *reduce labour costs* by reducing the rate of employers' social contributions and increasing the tax on value added. The medium-term objective is to *penalize unproductive activities*, those whose contribution to growth is dubious. From this perspective, it is undoubtedly necessary to

tax financial services and to make greater use of taxes on wealth and the transmission of wealth, as is recommended by the International Monetary Fund. Without prejudging the possible ways tax reform could be implemented, there is a two-fold importance to reform: first, to promote the production of industrial-type goods and services that are suited to international trade, and second, to carry out a redistribution of income and wealth in order to increase the potential demand for these goods and services.[\[7\]](#)

Industrial renewal poses a major challenge for the French economy, which is now caught between the German economy and the Spanish economy. It requires a reorientation of all the policies that affect and guide corporate behaviour, going beyond just manufacturing firms – policies that are not reducible to either the search for lower costs or to the promotion of new technologies or to compliance with the rules of free competition.

[\[1\]](#) On the nature of industrial organization, see Chapter 4 of the work by N. Georgescu-Roegen, 1971, *The Entropy Law and the Economic Process*, Cambridge Mass., Harvard University Press.

[\[2\]](#) See C. M. Christensen, 1997, [The Innovator's Dilemma](#), Harvard, Harvard Business School Press.

[\[3\]](#) G. B. Richardson, 1990, *Information and Investment*, Oxford, Clarendon Press. G. B Richardson, 1998, [The Economics of Imperfect Knowledge](#), Cheltenham, Edward Elgar.

[\[4\]](#) P. Aghion, M. Dewatripont, L. Du, A. Harrison and P. Legros, 2012), "Industrial Policy and Competition", [NBER Working Paper](#) 18048.

[5] Bolton P., X. Freixas, L. Gambacorta, and P. E. Mistrulli, 2013, Relationship and Transaction Lending in a Crisis, [BIS Working Paper](#), no. 17.

[6] T. Beck, 2013, Finance and Growth: Too Much of a Good Thing, [Vox eu](#).

J.-P. Pollin and J.-L. Gaffard, 2013, "Pourquoi faut-il séparer les activités bancaires?" [Why it is necessary to separate banking activities], [Note de l'OFCE, n° 36](#).

[7] Keen M., 2013, Tax Policy in (and for) Hard Times, Vox eu <http://www.voxeu.org/article/tax-policy-hard-times#.Um7TETxwZzA.gmail>

IMF, 2013: Fiscal Monitor, Taxing Times, World Economic and Financial Surveys <http://www.imf.org/external/pubs/ft/fm/2013/02/fmindex.htm>

Is it pointless to separate banking activities?

[Jean-Luc Gaffard](#) and [Jean-Paul Pollin](#)

It is at the European level that the last chance for a structural reform of the banking system can be found, that is to say, a separation between investment banking and retail banking. If we are to believe the banking industry and certain academic circles, such a separation is at best useless and at worst harmful. Separating risky activities from non-risky activities, or non-speculative activities from speculative activities, would, it is held, prove illusory. All banking activity is risky, if not speculative. After all, the

subprime crisis in the United States, the crisis of the savings banks in Spain, and the crisis of Northern Rock in the United Kingdom were all the result of reckless risk-taking in the granting of property loans to households. Furthermore, universal banks have to some extent helped to save overly specialized institutions. In these conditions, a minimalist law on separation such as the French law or a more binding law such as proposed in the Vickers report in the UK or like the one envisaged by the Liikanen Group would be of little use in terms of achieving stability. It would be better, then, to trust to prudential regulation, which should indeed be strengthened. This is particularly true since commercial banks should be able to develop market activities to meet the needs of their customers.

First of all, the existence of economies of scope that would justify bringing together commercial banking and investment banking have never been proven. Moreover, the "business models" of the two are very different, to the point that joining them may involve a risk of weakening the commercial bank's capacity to do its job. Furthermore, the argument set out above ignores in particular the systemic dimension of the financial and banking crisis. When the savings banks went bankrupt in the United States in the early 1990s, the consequences were circumscribed because the financial system was relatively closed. With the subprime crisis, the real problem came from contagion that was directly related to the close connectivity that had arisen within the financial system.

This is not a matter of simply recognizing that any banking activity entails risk, but rather of taking into account the impact of the contagion that market activity is primarily responsible for. It is especially transactions in derivatives that give rise to the interconnections between financial intermediaries. These are multiple, poorly identified connections created by market activities, which have had

devastating consequences on the traditional lending activity of banks because of reckless risk-taking and losses in market transactions (and not just in “proprietary trading” operations).

Naturally, in the face of systemic risk, prudential regulation does need to be strengthened. But however important it may be to regulate functions, this is undoubtedly less important than regulating the financial institutions themselves. Revenues from commercial banking are de facto relatively regular, apart from periods of severe crises, while those from an investment bank are much more volatile. An investment bank needs a commercial bank to withstand market fluctuations (and enjoy any available government guarantee), but the reverse is not true. The problem comes down to whether it is appropriate to take the risk of destabilizing the heart of the banking system in order to strengthen the pursuit of activities whose social utility is not always clear, and which should find their own means of survival.

Wisdom would thus have it that the financial system should be compartmentalized so as to limit any contagion. Regulations should specify the types of assets in which each category of institutions could invest as well as the type of commitments that they can make. This is what stands out from the legislative and regulatory arsenal developed in the United States and Europe following the Great Depression, an arsenal that was largely dismantled in France in 1984 and the United States in 1999 when the Glass-Steagall Act was terminated. This is what should be put on the agenda again by returning to an effective separation between commercial banks and investment banks. Not only would this separation create a certain seal between the various compartments of the financial system, but it would also help to avoid the dilemma associated with institutions that are “too big to fail”. The aim is to protect the commercial bank from market risk. It is also to put an end to the implicit subsidies that universal banks have

from the State, which are no longer really justified by separation and which can endanger the public purse. All these measures should be conducive to growth.

For more on this subject, please read [OFCE Note no. 39 of 19 November 2013](#) [in French] by Jean-Paul Pollin and Jean-Luc Gaffard, “Pourquoi faut-il séparer les activités bancaires?” [Why banking activities need to be separated].

Higher taxes – a solution to the crisis?

By Mario Amendola, [Jean-Luc Gaffard](#) and Fabrizio Patriarca

This question, which may seem provocative, is worth asking provided that consideration is given both to the full dimensions of the crisis, and not just its financial aspects, as well as to the assumptions needed to make this a credible scenario. In the perspective discussed here, if tax hikes are to play a role, it would not be as part of a fiscal adjustment intended to restore public accounts worsened by the crisis, but rather with the aim of maintaining or restoring a level of productive spending that was altered by increasing inequality. Furthermore, everything would depend on the nature of both the taxation and the government spending.

Everyone agrees today that rising inequality, particularly in the United States, has had an influence on the course of events. The indebtedness of the least affluent households merely delayed a fall in aggregate demand. The realization that these households were insolvent is what triggered the crisis. Furthermore, there is no solution in the medium or long term without deleveraging both households and business.

The role of the public authorities is to assist this. But they can do this only by taking decisions that wind up increasing the public debt. Public debt is thus substituted for private debt. The debt-financed public deficit also needs to be stretched out until consumers and business have been able to get back to a balanced financial position enabling them to raise their level of consumption and investment. This scenario is, however, running up against the potential insolvency of the states, a situation that is particularly aggravated in the euro zone. It does not actually explain what are the sources for a recovery in consumption and investment due to a failure to relate this to the implications of rising inequality in regards to the distribution of demand for productive and non-productive activities.

Recognizing the weight of inequality means, of course, recognizing that there is a problem with demand, but it also requires recognizing the heterogeneity of consumers and the non-homothetic nature of individual preferences. The rise in inequality is most of all changing the structure of demand. Some would say this is at the expense of goods consumed primarily by the mass of workers, to the benefit of luxury goods, while others would say at the expense of productive assets and to the benefit of existing financial and real estate assets.

The following mechanism might be at work. The richest households have excess savings that they devote, on the one hand, to the purchase of luxury goods and assets on the financial and real estate markets, and, on the other hand, to loans to less affluent households channelled through financial intermediaries. The rise in inequality thus has two combined effects: pushing up the price of assets purchased by the more affluent, and raising the level of indebtedness of the less affluent. The first effect supports the second by allowing the loans granted to rely on the increasing value of the assets pledged (the "collateral").

Based on the assumption that public spending is a productive expenditure – it fuels demand for goods and services from the productive sector – an increase in public debt would support aggregate demand and stem the recession. However, in the medium term, interest charges could make it difficult to sustain the public debt with – and this is key – a need to reduce public spending before there is a significant recovery in private spending. The substitution of public debt for private debt shifts the problem, without solving it.

One possible alternative might be to tax the income of the wealthiest households. Still on the assumption that public spending is directed at the productive sector, this kind of taxation would ensure a redistribution of income, with as a corollary a reconfiguration of the structure of demand in favour of productive activities. Another assumption would also be necessary: that the additional taxes are actually paid by households that use a significant portion of their savings for the purchase of non-productive assets. In this situation, the objective would not be to raise taxes to absorb the public deficit in the hope that an economic recovery would make it possible to reduce them later, but rather to make better use of taxation as a tool for redistribution. While the tax burden would indeed increase, the point is to tax incomes that, in large part, consist of rents that go to unproductive consumption.

The hypotheses used here are somewhat uncertain due to the nature of public expenditure and revenue. Some public expenditure is unproductive, and it is difficult to distinguish what is productive from what isn't. The tax increases would affect different categories of taxpayers without actually discriminating between them according to the structure of their spending.

Furthermore, our purpose here is not to set out a credible solution that can be applied immediately. The point is to highlight the illusory nature of all-embracing solutions,

whether this is a matter of generalized austerity, involving tax increases that wind up weighing down household and business spending, or the prolonged maintenance of public debt, which merely replaces private debt without affecting the structure of demand. So, following this analytical digression, this points to the conclusion that the effective implementation of a redistribution mechanism that could lead to an increase in potential output requires a reform of the state that affects both the orientation of public spending and the structure of taxation, all of which requires time and foresight, not to speak of political courage.

... See Amendola, M., J.-L. Gaffard and F. Patriarca (2013), "Inequality, debt and taxation: the perverse relation between the productive and the non-productive assets of the economy", [*OFCE Working Paper No. 2013-21*](#).

Vertical networks or clusters: what tool for industrial policy?

By [Jean-Luc Gaffard](#)

The concept of a "vertical network" [*filière*] is back in the spotlight and is playing the role of an instrument of the new industrial policy. A working document of the Fabrique de l'Industrie [Manufacturing Industry], "What use are 'vertical networks'?" (Bidet-Mayer and Tubal, 2013) recognizes that the concept has the virtue of helping to identify good practices and develop their application in relationships between

businesses and between business and government. However, the same paper concludes by questioning the merits of a concept that emphasizes an approach to industrial organization that is more technical than entrepreneurial.

Our purpose here is to explore this issue and to challenge the relevance of the “vertical network” concept and to advocate instead the notion of a “cluster”, which seems to correspond better to the need – for industrial policy – to recognize the leading role of the company in making strategic decisions.

The “vertical network”: a simplistic notion

In its old but strict sense, a “vertical network” consists of all or part of the successive stages of production, ranging from raw materials to the final product. This chain of products extends from upstream to downstream and is composed of technical relationships, which are identifiable based on technical coefficients of production. These are subsets of input-output tables that are characterized by the existence of a high level of spill-over or dominance effects that stem from the fact that the concentration of relationships is denser in some industries than in others (Mougeot, Auray and Duru, 1977).

Defined like this, a “vertical network” obviously says nothing about industrial organization *per se*, that is to say, about how firms set the boundaries for their activities. The companies concerned may choose to integrate the different stages in a vertical network or on the contrary focus on one stage and build pure market relations both upstream and downstream. They can also choose to form a relationship that could be described as a hybrid, based on medium-term contractual relationships both upstream and downstream.

The organizational decision takes place in a specific technical context, based on a comparison between the costs of operating through the market, through contracts or through

internal transactions ([Coase, 1937](#); Williamson, 1975). The technical features are covered over by the transaction costs and have limited relevance. The specific characteristics of the assets, which have a technical dimension, are taken into account in making the choice, but primarily because of the possibility for opportunistic behaviour (hostage-taking) that it permits.

The designation of a thusly defined "vertical network" as a tool of industrial policy, based on a certain stability of technical relations, creates an obstacle to innovation, whose major characteristic is to upset linkages within the vertical network and thus its very structure. In fact, the use of the "vertical network" concept really holds interest only for a short-term perspective, when it comes to measuring the impact of the transmission of cyclical fluctuations within a technically stable, productive structure (Mougeot, Auray and Duru, 1977).

The industrial policy measures that flow from this may affect how companies define the scope of their activities by affecting transaction costs. One example is the rules governing the relationships between contractors and subcontractors. But their effects are somewhat unclear with respect to the expected impact on the innovative capacity of the firms concerned.

The simplicity of the concept of a vertical network, together with its limitations, make the way that the concept is used (1) dangerous, if the fixed nature of the technique is taken literally (as has been the case in the past), and (2) ambiguous, if it is understood as dealing with the technical and organizational changes inherent in a market economy. As evidence of this ambiguity, consider a list of "vertical networks" today, which refer to objects such as cars, trains and planes; to luxury items whose most common feature is that they are aimed at a very rich clientele; to generic technologies such as information and communication technology;

and to social issues such as health care and the ecological transition, not to mention the mishmash constituted by the consumer goods industry.

While the notion of a vertical network, that is to say, a group of industries that are technically related, has to some extent fallen into disuse since the 1980s, it is precisely because strategic business decisions are far from being dominated by technology, and a frozen state of technology in particular. The structuring of the industrial fabric is constantly changing as a result of the choices and constraints that determine them. In other words, industries are more the result of processes of innovation than of technical frameworks that supposedly control strategic choices.

It is not surprising, then, that industrial policy in the narrow sense of direct aid to companies in specific sectors has itself fallen into disuse and made room for policies on competition and regulation that are designed as efforts to move closer to a state of full competition.

The company: the essential reference

This observation does not mean that intra- and inter-vertical network relations do not matter and that all that counts are market incentives. Companies are not islands of planned coordination in a sea of ??market relations. They come to agreements about technology, distribution and marketing and develop subcontracting relationships and create joint ventures ([Richardson, 1972](#)). There is a major reason for this. To invest, a company has a need for coordination that cannot be met simply by the competitive market, but rather involves the emergence of forms of cooperation that reflect membership in a particular group. This company is characterized by its mobility, which leads it to introduce new products or even to change vertical network, thereby upsetting the relationships it has formed with others, but always along a trajectory that is determined by its core competencies.

Generally speaking, companies interact and have to solve difficulties in coordination arising from a lack of information. This is not so much a lack of technical information as a lack of information about market conditions, meaning the configuration of demand but also of competing and complementary suppliers (Richardson, 1960).

In fact, companies face two deadlines: a deadline for the gestation of irreversible investments, including investments in intangibles, and a deadline for acquiring market information. To deal with this and decide how to invest effectively, companies need to have a certain degree of confidence about the levels of competing investments and of complementary investments. The coordination required is not assured solely by market signals or, more precisely, by price signals alone. This also demands that cooperative relationships between companies complement their competitive relations (Richardson, 1960). These relationships constitute business networks for which the qualification of a "vertical network" is undoubtedly too narrow, even if technical proximities or complementarities do play a role. Belonging to a group characterized by having broadly similar skills or qualifications, rather than to a vertical network or business sector, is related to these relationships which secure the investments of each group member.

Companies seeking to innovate do not mainly face the existence of entry barriers (due to the price or investment behaviour of the established companies) or barriers to business creation. They have to deal in particular with the existence of barriers to growth that are related to their ability to be mobile ([Caves and Porter, 1977](#)). It is obviously difficult for companies to enter new business fields or to increase their size significantly. They are successful in attaining new size thresholds whenever they can acquire new managerial capabilities and ensure control of their capital. They enter into a new activity, possibly one that is quite different from

their current activity in terms of the markets served, only so long as the technical and managerial skills in one business are useful in the other. Thus business groups come into being that are organized around similar or complementary skills, which transcend divisions into industries or sectors. These groups are the arenas where competition is carried out. Their very nature limits, or even thwarts, the development of an oligopolistic consensus. Because of their structural similarities, each group member responds in the same way to internal and external disturbances and anticipates the reactions of the others with a good deal of accuracy (Caves and Porter, 1977). A sort of coordination and mutual dependence thus develops within each group.

Based on this dual observation of the need for both coordination and mobility, it is clear that an industrial fabric is complex and can only with difficulty be reduced to "vertical networks" in the original meaning. Industrial policy is thereby inevitably affected, as it cannot be reduced to direct aid to firms, sectors or even technologies, nor to the application of rules on supposedly perfect competition.

Clusters: a suitable response

The nature of the productive system requires a horizontal industrial policy, which involves in particular subsidizing R&D and occupational training, but which makes sense only if this type of aid is conditional on the achievement of the objective of business mobility and of vertical as well as horizontal cooperation between companies.

It is with regard to this objective that the creation and development of *clusters* should be preferred, this being understood to mean groups or networks of companies and institutional structures that, while certainly having a geographical dimension, cannot necessarily be reduced to a strictly defined territory. A cluster is primarily a tool that aims to develop both voluntary cooperation between companies

and a network of expertise. Its configuration is determined by the companies. The capacity building that arises from this organizational network nourishes a capillary type of action and the progressive entry of the individual members into new fields of activity.

Logically speaking, the initiative for these clusters should come from the companies themselves, with the government's role being to encourage them, specifically by making its aid contingent on the reality of the cooperation achieved. Ensuring that there is genuine cooperation requires that public funding be conditional on the contribution of private funds. The method of governance must recognize the pre-eminent role of the firms in the industry. It is this feature that has underpinned the success of German industry – it is, to say the least, risky to chalk this success up to competitiveness gains generated by labour market reform (Duval, 2013).

In this light, there should be nothing surprising about the successes and failures of industrial policy. When these configurations have the characteristics of clusters in the sense used here, whether this involves aerospace, automotive or railway, the mechanisms implemented have allowed for credible projects that have promoted competitiveness. When the supposed industries are loosely or not at all structured and bear no relationship to clusters, the failures are obvious, because there are no eligible projects under existing public procedures and in particular because of the weak involvement of small and medium-sized enterprises in collaborative projects.

The fact that the vertical networks adopted cover almost every industry forbids, moreover, any real discrimination between the forms of industrial organization. There is thus a very real risk that public funds will be wasted. Some groups, who are accustomed to dealing with the government, will capture aid for projects that they would have carried out anyway, while at the same time companies that are engaged in

innovative activities will not win any support, due to failing to fit the pre-defined framework.

Once again on the question of company size

There is a functional relationship between organizational efficiency and the growth rate, with the first falling when the second rises beyond a certain threshold (Richardson, 1964). The exploitation of new investment opportunities normally goes to companies that have the most suitable production experience, business contacts and marketing skills. These capabilities are a matter of degree. The degree of organizational constraint will depend not only on the growth rate but also on the direction in which the expansion takes place. This will also depend on the extent to which the company concerned can acquire the skills, including managerial, required to be mobile without incurring excessive costs ([Richardson, 1964](#)). A cluster type organization will be able to help.

The cluster is a place for exchanges and skills transfers that facilitate the entry of firms into new fields of activity, even if only geographical, which should enable the smaller ones to grow in size. The cluster organization can also promote mechanisms that facilitate the access by small firms to the financing required for investment, while at the same time allowing them to retain control of their capital, and thus their identity.

By way of a conclusion

As is clear, industrial policy should not amount to planning based on a purely technical approach to industrial organization, the kind captured in the "vertical network" concept, which would make it hostage to local and national lobbies. Nor should it be reduced to regulatory and competition policies designed for a virtual world where the only relations among companies are market relations. It must

be understood as a way to stimulate the creation and development of clusters designed as operational networks of expertise, whose governance must be ensured under conditions that favour entrepreneurial decisions, and not bureaucratic ones.

Bibliography

Bidet-Mayer, T. and L. Toubal (2013): "A quoi servent les filières?" [What's the use of "industries"], Working document, La Fabrique de l'Industrie.

<http://www.la-fabrique.fr/Chantier/a-quoi-servent-les-filieres-document-de-travail>

Duval, G. (2013): *Made in Germany: le modèle allemand au delà du mythe*, Paris: Le Seuil.

Mougeot M., Auray J.-P. and G. Duru (1977): *La structure productive française*, Paris: Economica.

Richardson, G.B. (1960): *Information and Investment*, Oxford: Clarendon Press (Reed. 1990).

Williamson, O. (1975): *Markets and Hierarchies, Analysis and Anti-Trust Implications*, New York: Free Press.

Inequality and Global

Imbalances: reconsidering old ideas to address new problems

by [Jean-Luc Gaffard](#) and [Francesco Vona](#)

The main challenge of the Bretton Woods agreements was to reconcile social justice and full employment to be achieved through domestic policies with an international discipline and progress toward trade liberalization (Rodrick 2011). After more than six decades, such division of objectives between international and domestic policies has been questioned by the current economic crisis, characterized by high debt levels, remarkable global imbalances and low global demand. It can hence be useful to reopen an old debate by reconsidering ideas that were discarded in the past, such as the proposal of Keynes to create global demand stabilizers. Our suggestion is that a global stabilizer that prescribes surplus countries to gradually increase their wages can have both a direct positive effect on global demand, without increasing public debts, and an indirect one by favouring a reduction in income disparities.

The structural lack of global demand represents unquestionably the key constraint to exit from the great recession. Worldwide, sluggish demand appears as the resultant of two quite independent factors, a *constraint* and a *political choice*. The choice is of those countries, especially emerging ones plus Germany, that build up their wealth on export-lead growth using a mix of wage moderation and clever firms' industrial strategies. The public debt constraint, instead, impacts upon the possibility to expand demand of the majority of developed countries. As these countries should enforce restrictive fiscal policies to prevent default, their only chance to expand demand impinges on redistribution in favour of poorer households who consume a larger fraction of their incomes.

The current debate on this matter is misleadingly at best, oscillating between the usual Scylla and Charybdis of more or less state intervention. From a standard Keynesian viewpoint, the bottleneck in global demand is the consequence of neo-liberal policies, which in Europe are worsened by the opposition of Nordic countries against large scale public funded EU programs, possibly financed with EU bonds. From an orthodox viewpoint, which relies upon the belief in a trickle-down mechanism (increase the wealth of the rich eventually benefit all), the crisis represents an opportunity to remove the last barriers to a full liberalization of labor and goods markets. These barriers would prevent EU economies to raise their competitiveness with respect to their new emerging competitors, the BRICS (Brazil- Russia- India-China- South Africa). While Keynesians are overoptimistic in their belief that more public expenditures will succeed in ensuring a fresh start to our feeble economies, orthodox economics neglects by assumption the problem of global demand. In particular, it ignores that a race for competitiveness based on further wage moderation and welfare state cuts would only amplify the global demand constraint.

It is well documented that, in last thirty years, living conditions and real wages of both low and middle skilled workers decreased substantially while profits and, in general, earnings of top 1% earners increased impressively, especially since the 2000s (Piketty and Saez 2006, Eckstein and Nagypál 2004, OECD 2011). The widening in incomes has been especially large in the US and Anglo-Saxon countries where deregulated labour markets allow wage to adjust downward, but also affected European economies in other forms such as structurally higher unemployment rates and higher profit shares (Krugman 1994). The excessive decrease of the median wage with respect to the average productivity created a fundamental wedge between demand, which is more sensible to wage changes than to changes in profit opportunities, and supply, for which the opposite holds. Globalization plays a

key role in increasing inequality between profits and wages as increases in capital mobility were not accompanied in parallel increases in international labour mobility (Stiglitz 2012). Only the joint working of increasing debt (both private and public) and of productivity improvements related to new information & communication technologies prevented the demand deficit to emerge earlier together with the dysfunctional role of excessive inequality (see Stiglitz 2012, Fitoussi and Saraceno 2011, and on the role of technical change Patriarca and Vona 2013). Global imbalances played a key role in maintaining high the level of global demand as long as savings of countries with commercial surpluses (e.g. China) were borrowed to households and governments in countries with commercial deficits (e.g. the US). By mitigating the consequence of on excessive inequality, they keep also under control the political pressure for redistribution. But, as we have seen, they are a source of macroeconomic instability. In fact, the saving glut in export-led economies creates a mass of liquidity in search of investment opportunities that increases the likelihood of asset price bubbles, especially in presence of an inadequate and oversized financial sector (Corden 2011).

Leaving ethical considerations aside, the concern for rising inequality in western economies would have been irrelevant for overall growth provided the lower demand there was compensated by a growing demand in emerging and export-led countries, such as China. Unfortunately, the compensation did not and is not expected to take place soon for at least two reasons.

First, oligarchies in emerging economies (especially China) found it convenient to sustain global demand indirectly, rather than through wage increases proportional to productivity, by investing large current-account surpluses in the US financial market and so financing US consumers. The indirect empirical support for this argument is that inequality increased in China too since the market friendly

reform started. Especially inequality in factor shares, i.e. between profits and wages, increased substantially since the 1995 with the labour share falling by between 7.2% and 12.5% depending on the accounting definitions used (Bai and Qian 2010).

Secondly, a historical comparison of catching-up episodes can help shed light on the origin of the global demand glut. Between the second half of the 19th century and the beginning of the 20th century, the economic catching-up of both Germany and the US with the UK was soon followed by convergence in living standards and wages (Williamson 1998). Nowadays, the economic catching-up of China is much slower in terms of convergence of wages and living conditions. By way of example, China's GDP per capita increased from 5.7% to 17.2% of US GDP per capita from 1995 to 2010 (source: World Penn Tables), while the hourly labour compensation cost is also increasing but reached only 4.2% of the US labour compensation cost in 2008 (source: Bureau of Labor Statistics Data). This gap between GDP per capita and unit labour cost in China clearly shows that the catching-up in terms of workers' living conditions is far slower than the economic catching-up.

The reasons for this slow wage convergence deserve further investigations and have probably to do with factors affecting institutional changes that support redistribution from profits to wages, including culture and tax progressivity (Piketty and Qian 2009), in the catching up country. Certainly, the size of Chinese population relative to the world population did not help in fastening these institutional changes. By simple assumptions of standard bargaining theory, bargaining power depends on the outside option that, for workers, is limited by existence of a large 'reserve army' willing to work for extremely low wages. One can then argue that the larger the reserve army, the longer it takes to reduce the downward pressure on the workers' wages in the advanced part of the economy. De facto, the wage convergence has been much faster

in previous catching-up episodes since the labour constraint becomes stringent sooner due to the smaller size of the population, allowing workers to fight for better conditions and higher wages. In a nutshell, an excessively large reserve army in the countryside prevents both wages to increase and democratic reforms to take off in China, thus creating a wedge between the timing of economic growth and the one of political reforms, required to rebalance demand and supply.

Not only the slow wage convergence of catching-up country causes persistent global imbalances between demand and supply, it is also the essential reason of the obstacles faced to reduce inequality in western countries. First, implementing redistributive policies and increases in real wages are likely to further reduce competitiveness and to bring about a substantial investment outflows. Second, the trend of delocalizing production abroad can have forced workers to accept lower wages; an effect that is difficult to correlate empirically with observable proxies of globalization such as trade or investment outflows.. While empirical analyses looking at the last 30 years of the 20st century concur that globalization was not the main driver of inequality increases, recent evidence shows that: (i) Outsourcing had a negative impact on middle and low skill wages and employment levels in developed countries, especially in the last decade (Firpo, Fortin and Lemieux 2011); (ii) The effect of trade on inequality can be underestimated due to production fragmentation (Krugman 2008).

Global imbalances are also likely to create political obstacles to policies aimed at reducing inequality. An oversized financial sector contributed to increase earnings of the top 1% of the population and so their lobbying power. This allowed these super-rich to heavily influence political decisions making their rents higher, especially through a massive reduction of tax progressivity (Fitoussi and Saraceno 2012) and other opaque channels (e.g. fiscal loopholes,

Stiglitz 2012). Now, this lobby of super-rich makes it exceedingly difficult to limit the power of finance and restore fairer tax rates for financial rents and top incomes.

How to avoid the stalemate generated by global imbalances and global pressure for wage moderation? Are there in the system as it is endogenous forces that will eventually reduce global imbalances and inequality?

The first option is to wait for reforms in China. Politicians in western countries can hope in a speeding up of this process that will lead to a parallel increase in real wages and hence global demand. This will be the ideal market solution, but it is unlikely to occur in the short- and medium-run. A second possibility will consist in a large scale devaluation of western economies' currencies: Dollar, Euro and Yen. However, such a policy is likely to create a devaluation spiral, also increasing investment uncertainty. Moral suasion is unlikely to convince Chinese politicians to not devalue the Yuan as their assets in dollars and euro will depreciate substantially. A third protectionist solution is not convincing at all as it is likely to trigger a retaliation spiral paving the way for global wars. Indirect and global political interactions are an issue at stake here: nationalistic political parties and the associated protectionist policies are more likely to become popular if the timing of Chinese reforms is too slow and so the adjustment process too painful in the medium-run. A fourth solution is to resort to an old idea of John Maynard Keynes on 'global automatic stabilizers'. In the post-WWII context, Keynes proposed an international institution, the so-called International Clearing Union' (ICU), to reabsorb both commercial surpluses and deficit, seen as equally worrisome (see also the article in Italian of A. Bramucci 2012). In particular, persistent commercial surpluses were seen as a potential source of long-term shortages of global demand. The main idea was to coordinate through the ICU both re-

evaluations and demand expansions for the countries in surplus, and de-evaluation and control of capital movements for countries in deficit. Such an institution would go in the right direction to help reabsorbing global imbalances, but lack enforcement power to ensure that the necessary adjustments are effectively put in place.

Combining a global rule for wage adjustment with WTO sanctions can represent a more clever and reliable way to revive global demand. The first part of the proposal would consist in linking real wage growth not only to productivity growth, as proposed by A. Watt (2011), but also to commercial surplus. Conditioned to the country's level of development (so the prescribed adjustments should take into account of initial level of GDP per capita and obviously adjusted for PPPs), countries experiencing medium-term growths both in productivity and in the commercial surplus have to increase real wages. Otherwise, other countries could raise tariffs on the products exported by the country that does not follow the rule. The effective capacity to implement of the rule can be reinforced by giving to Unions, either global or local, and NGOs the power to control for specific situations where the rule is not respected, i.e. special export-oriented zone in China where labour standards are particularly low. In the case of commercial deficits, the country could be asked to follow (real) wage moderation and to put under control public deficit. In such a context, these restrictive policies would have limited harmful effects on growth for the increase in external demand that follows the wage increase in the export-oriented countries. The proposal would have also positive effect in reducing the overall level of functional inequality worldwide, restoring a more balanced distribution between wages and profits.

Overall, the coordination of global demand and supply would be restored using a simple automatic stabilizer that will neutralize the protectionist treat and, at the same time, will

relax the constraints that prevent inequality-reducing policies to be approved in western countries.

Readings:

- Bai, C., Qian, Z., 2010, "The factor income distribution in China: 1978-2007", *China Economic Review*, vol. 21(4), 650-670.
- Bramucci, A., 2012, "Gli Squilibri Europei e la Lezione di Keynes", sbilanciamoci.info.
- Corden, W., 2011, "Global Imbalances and the Paradox of Thrift", Policy Insight No.54, Centre for Economic Policy Research (CEPR).
- Eckstein, Z., Nagypál, É., 2004. "[The evolution of U.S. earnings inequality: 1961-2002](#)", *Quarterly Review*, Federal Reserve Bank of Minneapolis, issue Dec, 10-29.
- Firpo, S., Fortin, N., Lemieux, T., 2011, "[Occupational Tasks and Changes in the Wage Structure](#)," *IZA Discussion Papers* 5542, Institute for the Study of Labor (IZA).
- Fitoussi, J.-P., Saraceno, F., 2011, "[Inequality, the Crisis and After](#)," *Rivista di Politica Economica*, issue 1, pages 9-27.
- Krugman, P., 1994, "Past and prospective causes of high unemployment," Proceedings, Federal Reserve Bank of Kansas City, issue Jan, 49-98.
- Krugman, P., 2008, "Trade and Wages, Reconsidered", *Brookings Papers on Economic Activity*, vol. 39(1), 103-154.
- OECD (2011), *Divided We Stand: Why Inequality Keeps Rising* www.oecd.org/els/social/inequality.
- Ottaviano, G., Peri, G., Wright, G., 2010, "[Immigration, Offshoring and American Jobs](#)", CEPR Discussion Paper N8078.
- Patriarca, F., Vona, F., 2013, "Structural Change and the Income Distribution: an inverted-U relationship", *Journal of Economic Dynamics and Control* forthcoming.
- Piketty, T., Qian, N., 2009, "[Income Inequality and](#)

[Progressive Income Taxation in China and India, 1986-2015](#)", [American Economic Journal: Applied Economics](#), vol. 1(2), 53-63.

- Piketty, T., Saez, E., 2006, "[The Evolution of Top Incomes: A Historical and International Perspective](#)", [American Economic Review](#), vol. 96(2), 200-205.
- Rodrik, D., 2011, *The Paradox of Productivity*, New York: Norton & Cie.
- Stiglitz, J., 2012, *The Price of Inequality: How Today's Divided Society Endangers Our Future*, [W.W. Norton & Company](#).
- Watt, A., 2012, *La crisi europea e la dinamica dei salari. La rotta d'Europa, 1. L'economia. Sbilanciamoci!*, sbilibri, 2.
- Williamson, J. 1998. *Globalization and the Labour Market: Using history to inform policy.* in: Aghion, P., Williamson, J. 'Growth inequality and Globalization: Theory, History and Policy', Cambridge University Press.