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Capital Prices and Eurozone Competitiveness Differentials

Philippe Askenazy[*]

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[*] Cepremap, Paris School of Economics − CNRS and IZA, 48 bd Jourdan, 75014 Paris, France. Philippe.askenazy@ens.fr

Abstract: Competitiveness differentials are blamed for the instability of the Eurozone. Most of the analyses focus on labour costs or labour-market institutions. This paper explores an additional source of differentials in competitiveness: land and building prices. European countries, especially France, have experienced a significant rise in property prices since the beginning of the century. Germany is an exception. A large increase in the prices of buildings, structures and lands for private companies can be also observed in some countries. Higher prices impede firm competitiveness in at least two ways: a) investments are more costly; b) the increasing value of non-financial assets should translate into higher equity value and thus incite firms to increase dividends so as to preserve firm owners' direct remuneration.

French national accounts provide rich information for exploring these mechanisms. We show that the nominal value of buildings, structures and land owned by non-financial corporations dramatically increased relative to their value added, well above their historical observations. We argue that, in France, non-financial corporations (NFCs) pay a large supplementary cost for their investments and have to distribute massive additional dividends. The yearly charge counts for at least 4% of their value added.

JEL codes: E22, E31, J30

Keywords: Eurozone, competitiveness, non-financial asset prices, housing bubble

Résumé : les écarts de compétitivité entretiennent l'instabilité de la zone Euro. La plupart des analyses s'attardent sur les coûts de la main-d'œuvre ou les institutions du marché du travail. Cet article explore une source supplémentaire de différentiels de compétitivité : le prix des terrains et des bâtiments. Plusieurs pays européens, notamment la France, ont connu une hausse significative des prix de l'immobilier depuis le début du siècle. L'Allemagne est une exception. Une forte augmentation des prix des bâtiments, des structures et des terrains pour les entreprises peut également être observée dans certains pays. La hausse des prix entrave la compétitivité des entreprises par au moins deux canaux : a) les investissements sont plus coûteux ; b) l'augmentation de la valeur des actifs non-financiers devrait se traduire par une valeur plus grande des fonds propres et donc inciter les entreprises à augmenter les dividendes de manière à préserver la rémunération directe des propriétaires du capital.

Les comptes nationaux français fournissent des informations détaillées pour explorer ces mécanismes. Nous montrons que la valeur nominale des bâtiments, des structures et des terrains détenus par les sociétés non financières a considérablement augmenté par rapport à leur valeur ajoutée, bien au-dessus des observations historiques. Nous soutenons qu'en France, les sociétés non financières (SNF) payent un surcoût significatif pour leurs investissements et distribuent des dividendes supplémentaires massifs. Leur poids total représente au moins 4% de la valeur ajoutée des SNF.

Introduction

Competitiveness differentials are blamed for contributing to the instability of the Eurozone. With a common currency, the exchange rate cannot compensate these differentials. The results are massive trade or current account surpluses, essentially for Germany, and trade deficits for most Southern European countries.

Various sources of the lack or the gain in competitiveness have been studied. However, most of the analyses focus on labour costs or labour-market institutions. Wage moderation is presented as the key to the German success. For the second Eurozone economy, France, employer organizations, international institutions, official reports, notation agencies and even some trade unions, stress excessive labour costs. For example, when Moody's downgraded the credit rating of French public debt in November 2012, it stated that "The rise in France's real effective exchange rate in recent years contributes to [the] erosion of competitiveness, in particular relative to Germany. The challenge of restoring price-competitiveness through wage moderation and cost containment is made more difficult by France's membership in the monetary union." Theoretically, high labour costs should not only increase production costs but also reduce firms' profits and, consequently, their capacity to invest, especially in R&D. Thus, they hamper both price and non-price competitiveness. This diagnosis is the rationale for recent choices of the French government to cut corporate taxes, but also for a variety of reforms liberalizing the labour market or reducing wages in other European countries. Conversely, some economists advocate wage inflation in Germany or the adoption of a European wage standard (e.g. Brancaccio, 2012).

This paper explores an additional source of competitiveness differentials: land and building prices. Some European countries have experienced a significant rise in property prices since the beginning of the century. Germany is again an exception: the prices were flat, and even declining. A potential mirror image is a large increase in the price of buildings, structures and lands for private companies. Higher prices for these assets impede firm competitiveness through at least two channels. First, investments are more costly. Second, the increasing value of non-financial assets translates into higher equity value and thus motivates firms to allocate greater resources to dividends so as to preserve capital owners' direct remuneration.

The exploration of this assumption requires reliable information on the price trends of buildings, structures and lands for private companies. Unfortunately, there exists no standard price index for such assets. Alternatively, we could exploit corporate balance sheets to assess non-financial assets. These data, however, are only available for a minority of Eurozone countries. In addition, in all but one large country, the information is partial. The exception is France: French national accountants provide complete records of flows and stocks for buildings, dwellings, structures and lands of non-financial corporations (NFCs).

The case of France is not only interesting because of the availability of such data. Housing prices soared over the past decade. While in the second part of the past century, prices followed the growth of the gross disposable income, the property price/income ratio is now well above its historical level, by about 80%. As a consequence, even if the markets are segmented, we may expect prices of assets owned or bought by firms to have also increased significantly.

We show in fact that the value of buildings, structures and lands of NFCs in France dramatically increased relative to their value added, here again well above the historical observations. This phenomenon is mainly due to revaluations. We can thus compute implicit price indexes for these assets. Equipped with these tools, we can estimate some of the impacts of the building and land bubble. In 2011, non-financial corporations paid a surplus cost for their investments of at least 20 billion euros, and they had to distribute 25 billion euros of additional dividends. The total cost is huge for non-financial companies. It is equivalent to about one third of employers' social contributions, or twice the additional labour expense due to the trend in unit labour costs since the beginning of the century.

The first section presents some basic facts on current account imbalances, wage growth and housing price increases in the Eurozone. The second section demonstrates the exceptional magnitude of the rise in French land and building prices. The consequences of this inflation for non-financial companies are explored in the third section. A conclusion follows.

1. Current accounts, wages and housing prices in the Eurozone

A striking fact about the Eurozone is the growing current-account imbalances before the Great Recession (see Table 1); they are still large in 2011. Most of these imbalances are due to larger trade surpluses *versus* deeper trade deficits. More precisely, Germany, the first European economy, has gained massive surpluses, while most other countries have experienced a degradation of their net trade position. Even exporting countries, including the "AAA" Finland, faced a reduction in their surpluses. Now, the Eurozone's external trade or the current account remained globally balanced. Therefore, we can argue that key problem of the Eurozone is not its global competitiveness but rather the large competitiveness differentials within the Eurozone, between Germany and its main partners.

Table 1: Growing imbalances within the Eurozone before the Great Recession.
**Current accounts as a percentage of GDP (2000, 2008, 2011)**

	2000	2008	2011
Austria	-0.7	4.9	0.6
Belgium	4.0	-1.3	-1.4
Finland	7.7	2.6	-1.6
France	1.4	-1.8	-2.0
Germany	-1.8	6.2	5.7
Greece	-7.8	-14.7	-9.8
Ireland	0.1	-5.7	1.1
Italy	-0.5	-2.9	-3.1
Luxembourg	13.4	5.4	6.9
Netherlands	2.0	4.3	9.7
Portugal	-10.4	-12.6	-6.5
Spain	-4.0	-9.6	-3.5

Source: OECD.

A natural explanation of the divergence between Germany and most of the Eurozone is the large differentials in the evolutions of wages (and manufacturing production) since 2000.

Because of lack of common methodology or quality concerns, comparisons from statistics by industry (e.g. manufacturing) are not reliable[1]. But aggregated observations draw a clear picture: the cumulative hourly wage inflation between 2000 and 2008 in the business sector is nearly 10% lower in Germany than in France. The differential is even larger with Spain and Ireland, two countries acutely affected by the Great recession, but also with Finland, which resists relatively well. Labour costs follow similar trends.

Figure 2: A double German exception.
Hourly wage and salary inflation in the business sector (2000-2008Q3) and
housing inflation in selected Eurozone countries (2005Q1-2008Q3).
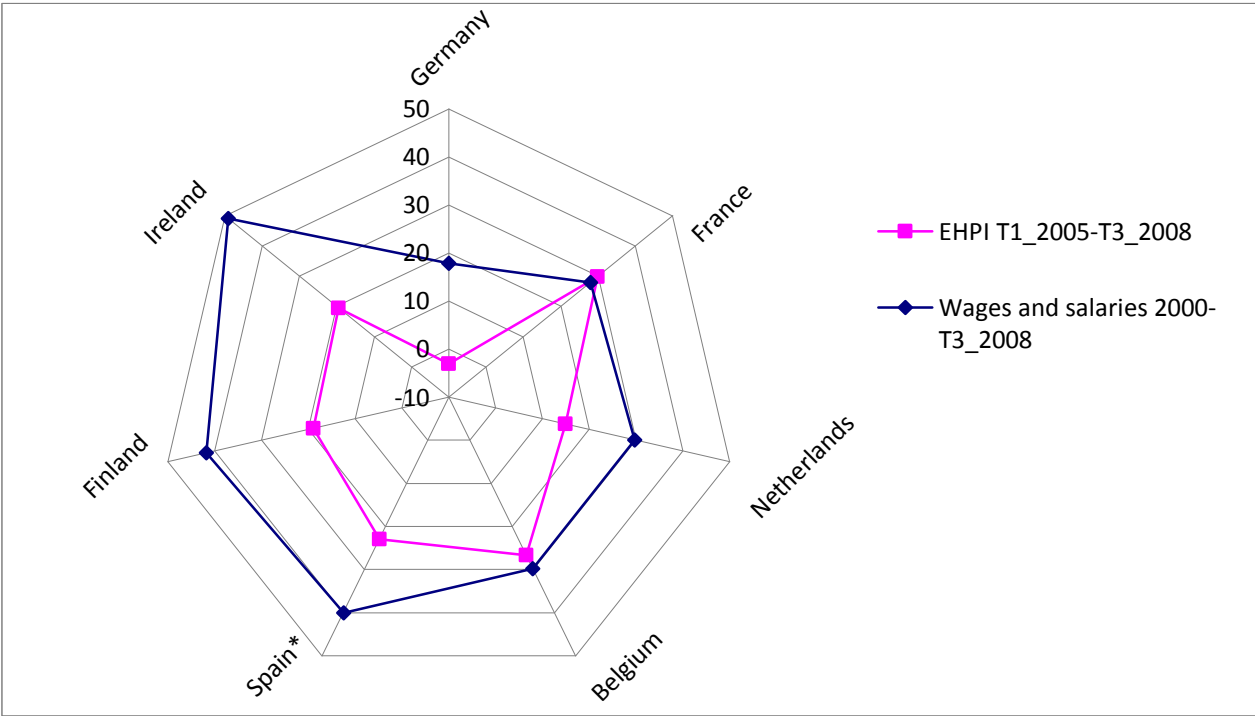
Sources: Experimental Housing Price Index (Eurostat). Quarterly European Labour Cost Index, hourly wages and salaries (Eurostat). Accessed on January 22, 2013.
* For Spain, EHPI data are available through Q3 2005. We assume that the price increase between Q1 and Q3 2005 is proportional to one between Q3 2005 and Q3 2008. Data for Italy, Portugal, Greece and Austria are not available.

Germany, however, is not only an exception for wage dynamics. Eurostat provides an experimental index for housing prices since 2005. During the 2005-2008 period, nominal property prices in Germany declined, while they steadily rose in other Eurozone countries. Property inflation was particularly significant in France and Belgium. These trends are consistent with national non-comparative sources suggesting that the divergences in housing prices between Germany and most Eurozone countries began on the eve of the century (see section 2).

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[1] The various sources for wage or labour costs report quite different readings, especially for France. See appendix for a discussion on the quality and the relevance of some sources.

Recent papers argue that the property price increase may alter competitiveness through two channels. First, it may hinder the opportunity to reach competitiveness agreements between employees and employers, who face higher costs in gaining access to property (*Projet de loi de Finance* 2013, 2012); in that perspective, labour price is connected to property price. Second, Egert and Kierzenkowski (2010) provide some evidence that the evolution of property prices triggered resource reallocation from the exporting sector to the construction sector.

In this paper, we explore the consequences of a different dimension: the rise in price of commercial and industrial real estate. The next section proposes an estimation of the magnitude of this rise in France.

2. French "bubbles"

France is facing a price level in residential real estate that has not been seen since the First World War. The price/disposable income ratio rose by about 70% in only 6 years between 2002 and 2008, while it had remained in tight range since the 1960s (Figure 3). This ratio declined in 2009, but it has come back up to its pre-Great-Recession value. Preliminary data for 2012 confirm stabilization at this high level. Therefore, France has experienced a huge price increase, similar to the one observed in Spain. Outside the Eurozone, housing prices also rose dramatically prior to the Great Recession. France now seems to be an exception, with no sign of price decline, while housing prices have dropped in Spain, the UK and the US, at least relatively to household disposable income. There is intense debate on the existence of a housing bubble in France. On the one hand, some analysts argue that the mortgage debt of French households represents a sustainable level – less than 70% of their disposable income. In addition, the amount that can be borrowed for a given income has moreover become much greater, thanks to the lengthening of loan maturities and to the decrease in the interest rates. Prices have also grown because of the potential structural imbalance between offer and demand: construction of new dwellings had become disconnected from demographic dynamics. The problem may have worsened because of a mini-baby boom since the end of the 1990s, France having one of the highest fertility rates in the European Union. On the other hand, the French real estate market now seems blocked: the number of transactions has fallen by 10 to 20% in 2012; real estate agencies are laying off thousands employees.

Regardless of whether or not there is a housing bubble, can such an evolution be found in the prices of tangible assets held by firms in France?

Figure 3: Long-run property prices/household disposable income, selected countries (1965-2011).
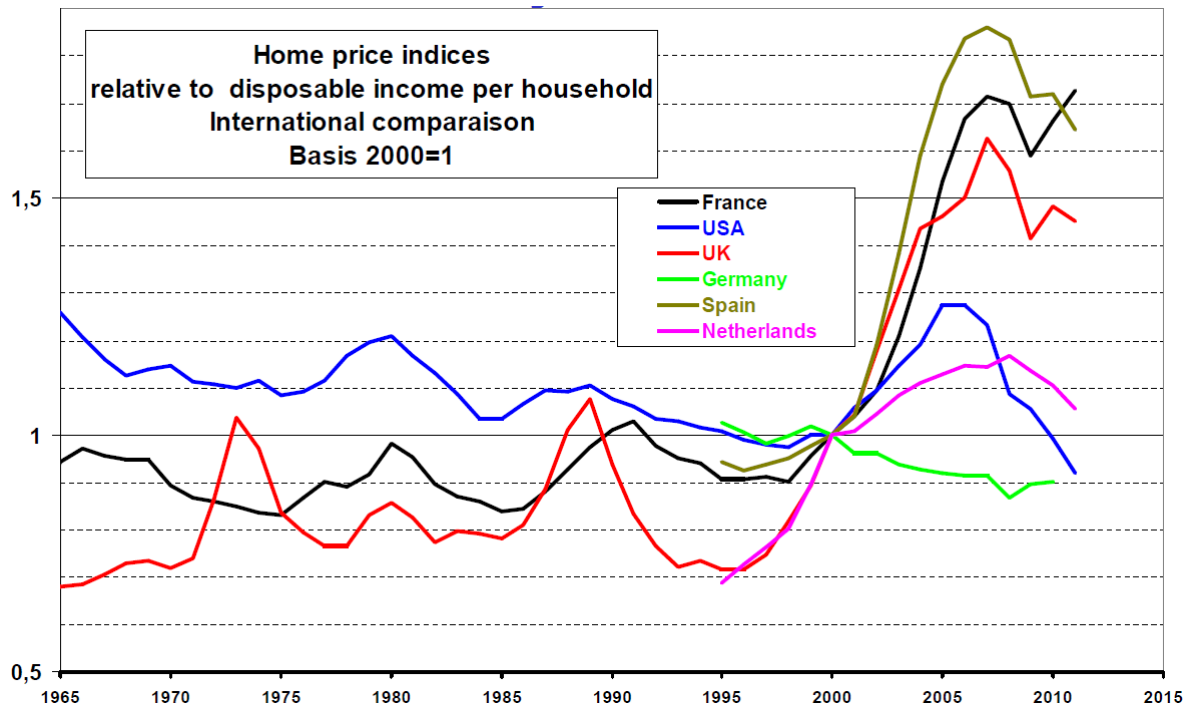

Source: Friggit (2012) from various national series.

While part of the capital held by non-financial corporations is in rental investment, it is essentially composed of lands, other buildings and structures. Moreover, the factors that may explain the rise in prices of residential real estate, demography in particular, do not have necessarily a significant influence in the case of commercial real estate. It is therefore not relevant to use housing prices as a proxy. However, changes in balance sheet items make it possible to create an implicit index: we use annual reassessments of capital stocks to construct an implicit annual growth in prices that we chain to obtain a multi-annual index (Figure 4). More precisely:

$$p^{land,building}_t / p^{land,building}_{t-1} = 1 + (\text{revaluation of the stock of lands and buildings})_t / (\text{value of the stock of lands and buildings})_{t-1}$$

The same exercise can be performed for equipment or intangible productive assets (software…). Results are given in Figure 4.

**Figure 4: Implicit price indices of capital employed; base 1 = 1995. French NFCs**
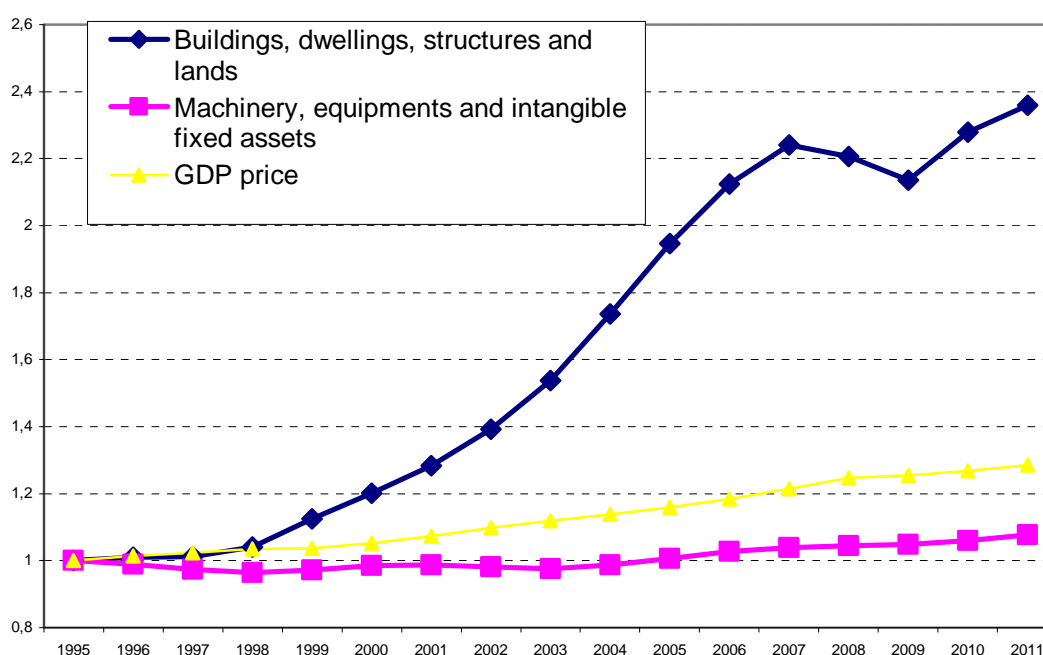
Sources: Author's calculations from national accounts, INSEE (semi-final for 2010, provisional for 2011) and from balance sheet variations.

For the non-financial corporations, the prices of machinery, equipment and productive fixed assets have remained quite flat over the 1995-2011 period, reflecting in particular the continually decreasing prices of information and communication technology equipment (ICT). Conversely, the implicit prices of buildings, civil engineering, housing and land belonging to NFCs have more than doubled. They have followed the evolution of GDP prices until 1998, before showing a steep increase that accelerated from 2002 onward, up to the Great Recession. The same timing can be found in the evolution of residential real estate prices. The price increase is also on the same scale.

The price level since the beginning of this century mechanically implies a higher nominal value of assets held by non-financial companies. Figure 5 thus relates values of different types of assets belonging to NFCs to the gross value added at factor cost over the long period. The value of equipment, machinery and intangible fixed assets related to added value remain unchanged at about 50%.

The value of land, buildings and structures owned by non-financial corporations also counted for a constant share of the value added until 1999, despite the bursting of an emergent housing bubble in France during the first part of the 1990s. After that, the share of value added has increased steadily. By 2011, it was about 80% above its historical value. As a result, the total value of the assets employed by NFCs rose to 450% of the gross value added at factor costs in that year, up from less than 300% during the two last decades of the previous century.

Figure 5: Employed capital and equity value disconnecting from value added. French NFCs. Percentage of the gross value added at factor cost, 1979-2011.
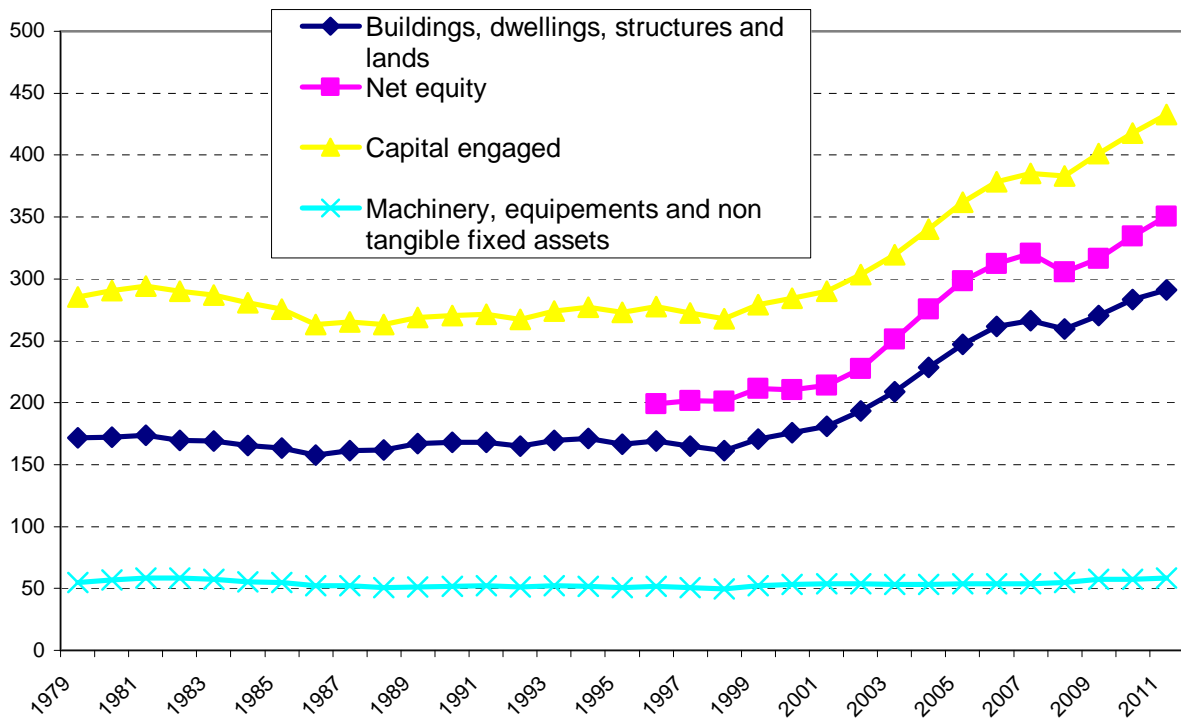
Sources: Author's calculations from INSEE national accounts (semi-final for 2010, provisional for 2011) and from balance sheet variations.

Is this phenomenon particular to France within the Eurozone? Again, complete non-financial data records are available only for France. Nevertheless, the OECD provides partial information for buildings and structures in Germany, the Netherlands and Finland. We observe that before the Great Recession, the building and structure value/value added ratio steadily increased in Finland, and with a greater magnitude in France (Table 6). Conversely, this ratio was flat or even declining, in Germany and in the Netherlands. It is intriguing that France and Finland experienced a contraction in their current account surpluses, while Germany and Netherlands performed well during the 2000s. Note also that the Dutch case suggests the building and structure value/value added ratio does not necessarily follow the property prices/household disposable income figures (fig 3. *versus* tab. 6).

Table 6: Value of buildings and structures as a % of the gross value added, 2000-2011. Non-financial corporations. France, Finland *versus* Germany, Netherlands.

	2000	2008	2011
Finland	130.5	140.3	144.8
France	121.4	137.2	154.8
Germany	127.2	121.9	125.5
Netherlands	144.4	141.3	147.0

Source: OECD national accounts and balance sheets for non-financial assets; author's calculations.

These various pieces of evidence suggest that France is confronted at the least by prices and values of different real estate assets that are far from their historical levels. In the next section, we study the potential consequences of this capital "bubble" for firms.

3. The cost of the capital "bubble" for non-financial corporations in France

This section explores two channels through the increase in asset prices may affect firms' competitiveness: the costs of investments and the altered firms' performance ratios. We focus on non-financial corporations since we can not disentangle the professional and personal assets in partnerships.

Costly investments and source of inefficiencies

A first consequence of "abnormal" prices of real estate assets is that firms must pay out much more nominally for the same capital volume. Nevertheless, a distinction must be drawn between residential real estate held by non-financial companies, "other buildings and structures" and lands.

Because of the substitution between renting your home and buying it, the higher property prices can be reflected in the rental prices paid by households. Concurrently, the revenue of non-financial corporations that rent dwellings to households may also be larger. The estimation of potential extra cost paid for dwellings that is not compensated by extra revenue requires detailed information on the evolution of rental prices. Unfortunately, we do not have available an index of rental prices for property held by NFCs. Such firms have practices that are different from those of social landlords, and they own property whose nature and quality differ from rental property owned by individuals.

For land, the net flows are tiny. Their weight is less than +/- 0.5% of stocks each year. As a result, the net impact of land prices on non-financial corporations is a priori not significant. However, new investors are must confront the high cost of land, while corporations that sell land realize large capital gains. In fact, a land bubble probably causes a variety of inefficiencies. It tends to favour existing companies and conversely acts as a disincentive for firm creation or expansion; consequently, it may hamper the creative/destruction process and restrict innovation efforts. It may also incite[2] employers to locate their production in less costly territories, despite additional transportation costs, slower reactivity, or mismatches in workers' skill. The evaluation of these costs and inefficiency could be a stimulating line of research, but it requires detailed micro-data.

However, we can estimate an extra cost for gross investments in "other buildings and structures". The major share of these assets is used directly by the firm in its production. However, such investments may equally be for rental to other non-financial corporations, even to other actors (state, associations, individual entrepreneurs). In the absence of precise

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[2] An abundant literature shows that land prices influence the localization of activities at the international, national and local levels (see e.g. Arauzo-Carod, 2005). For example, the high value of the land on which rests the plant of the car manufacturer PSA in Aulnay (300 million euros, and which is expected to appreciate due to a project of subway connection to the Paris network) is one motivation for the closure of this plant in 2014.

data, allow us nonetheless to make the hypothesis that these rentals are essentially between NFCs. In this framework, an increase in rent occurs correlatively with an investment in commercial buildings, and this increase is borne by a firm; the net effect would thus be null within the set of non-financial companies. Under this hypothesis, if the prices of buildings and structures (omitting dwellings) relative to the value added were in 2011 at their level of 2002, non-financial corporations would have had to lay out approximately 20 billion euros less in 2011, out of a total of 62 billion for the acquisition of the same volume of capital.

**Poor financial ratios, but massive surplus dividends**

Costly investments and the associated inefficiencies are not the sole consequences of a rise in asset prices. A large increase in the nominal value of assets of firms also dramatically alters their financial ratios. It may thus change their behaviour, especially vis-à-vis stockholders.

The profit share of French NFCs, defined as the ratio gross operating surplus / value added at factor cost, has evolved only slightly since the creation of the Eurozone. According to the national accounts between 1999 and 2008, the profit share has increased very moderately. Nonetheless, it seems to be eroding since the onset of the Great Recession, slipping under the 30% figure; but it is an evolution of just a few points. Taking into account the uncertainties surrounding the measurement of profit share, such a difference may be non-significant. Allows us take a single difficulty from the national accounts to illustrate this point: the statistical discrepancy concerning the net lending/borrowing position. For non-financial corporations, the difference between financial accounts and production accounts reaches 20 billion euros in 2011, i.e. about 2% of the value added. This is partially caused by different conventions for valuating stocks. Figure 7 thus reports the profit ratio when we calculate the net position according to the financial accounts rather than according to the output accounts. The profit ratio in 2011 then appears scarcely a half point below its 1999-2007 average, and above its value in 2002. The Bank of France also obtains a weak erosion of the profit margin using its own database of corporate accounts (Banque de France, 2012).

On the other hand, statistical uncertainties or conventions cannot call into question the reality of the spectacular increase of the share of net property income paid out in the value added of French non-financial companies. In 2011, it attained a new record level since the French Liberation, and especially it is 3 points higher than its share at the beginning of this century (Figure 8).

If margins are scarcely eroded and if dividends have taken off, then why do firms in France deplore the reduction of their profitability and judge the level of dividends as normal? The steep appreciation of assets provides an explanation.

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Figure 7: A measurement of the profit share… within a couple of points.
Profit ratios of French non-financial companies at factor costs,
according to the net position chosen. Percentages, 1999-2011
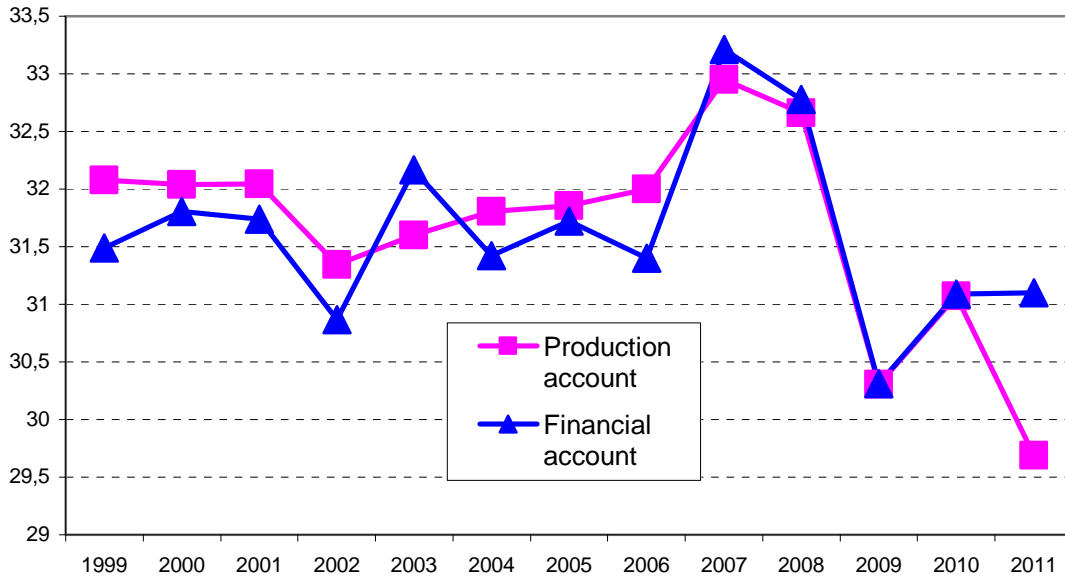
Sources: Author's calculations using the INSEE national accounts (semi-final 2010, provisional 2011) and Eurostat. The measurement by the production accounts is the standard method (GOS/VA at factor costs). The measurement by financial accounts adds to the gross operating surplus (GOS) and to the value added (VA) the difference between the net position from the production accounts and the net position from the financial accounts.

Figure 8: Net distributed property income as a share of value added at factor costs.
French non-financial corporations. Percentage, 1999-2011.
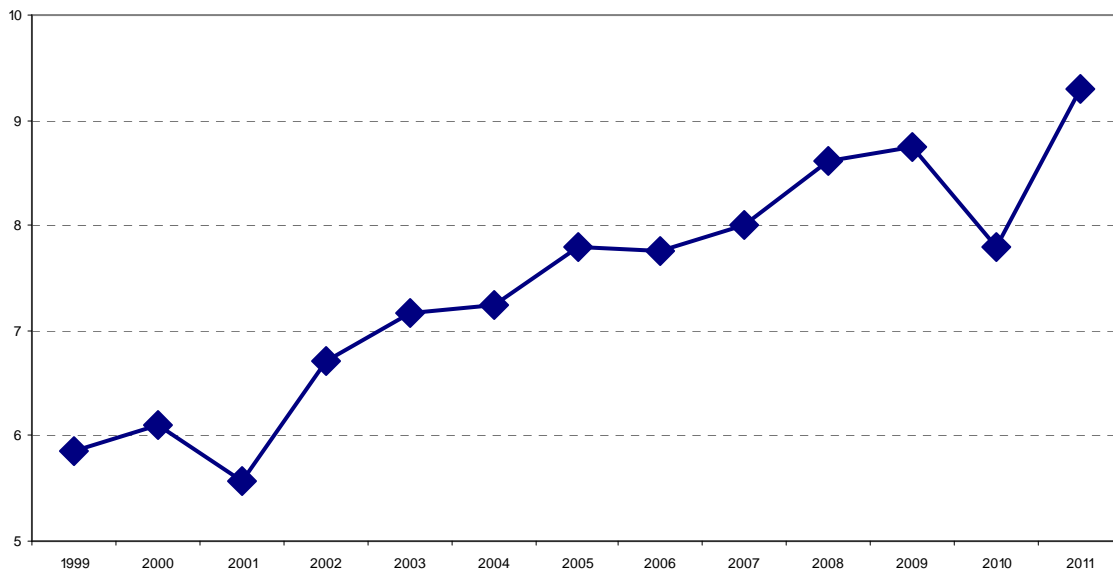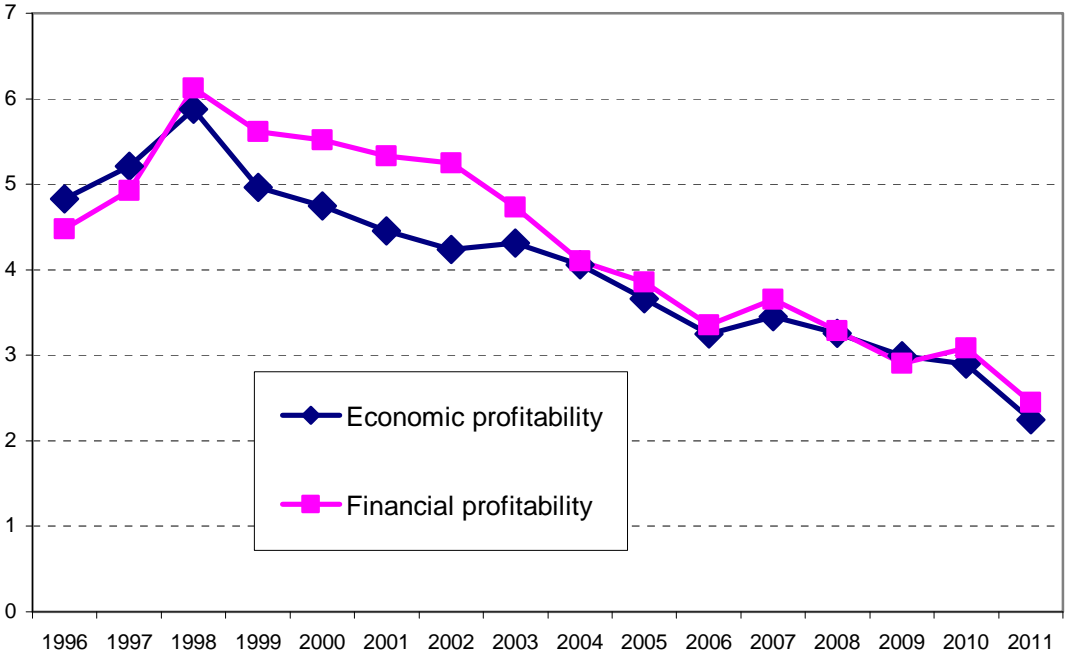

Sources: Author's calculations using the INSEE national production accounts (semi-final 2010, provisional 2011).

Let us calculate in a first step the economic profitability or financial profitability. From a financial perspective, in a given economic and fiscal structure, the national accounts, in tandem with the complete set of balance sheets, enable us to capture in a comprehensive manner the economic or financial profitability of non-financial corporations.

It is possible in this way to define the after-tax economic profitability of non-financial corporations: net operating surplus, diminished by corporate tax, and divided by the non-financial capital employed (fixed assets such as dwellings, other buildings and civil engineering, machinery and equipment, and software, land, stocks, patents…) belonging to non-financial corporations. The financial profitability measures the income created by NFCs from their equity. It is thus the ratio between the net operating surplus minus interest payments and taxes, and the net equity. The net owners' equity consists of net holdings of stock and shares of UCITS, of net changes in insurance technical reserves, and net book value.

The difference between the after-tax economic profitability and the financial profitability results from the financial leverage: when the economic profitability is superior to the cost of debt, then the financial profitability exceeds the economic profitability, the surplus generated benefiting stockholders alone. When calculated over the set of all non-financial corporations, the positive or negative differential is generally limited, the economic and financial profitability in the aggregate evolve together.

Figure 9: The collapse of financial and economic profitability of French non-financial corporations. Percentage, 1996-2011.

Sources: Author's calculations using the INSEE national accounts (semi-final 2010, provisional 2011) and balance sheet variations.

Both economic and financial profitability have collapsed[3] by half since the beginning of the present century (Figure 9). However, consistent with the sharp drop in interest rates, the leverage, which was null in 2008, became clearly positive again in 2011.

Whence cometh this collapse? Concerning the economic profitability, we have seen that it is the denominator − the value of capital employed − that has increased substantially with prices of lands and buildings. Since financial profitability and economic profitability are quite close, the nominal value of firms' shareholder equity has soared with the value of employed assets. Based on the value added at factor costs, the shareholder equity of non-financial corporations has gone from about 200% of the GVA (gross value added) of the NFCs at the beginning of the century to nearly 350% in 2011, according to the provisional national accounts.

The sharp increase in the value of shareholder equity has a knock-on effect on the whole set of financial ratios and, correlatively, on access to credits and on the distribution of income from property, essentially dividends.[4] Low profitability can be a barrier for obtaining credits. However, the use of non-financial assets as collateral should overcome this barrier.

In perfect capital markets *à la* Modigliani-Miller, dividend distributions do not create worth. However, firms may be incited to distribute dividends. The signaling dimension is important and quite asymmetric. The fiscal dimension is essential as well, according to the relative taxation of capital gains or dividends. Furthermore, the dividend distribution rate turns out to be very sensitive to fiscal reforms. Along these lines, in the United States; a change in taxation led to a reduction by half of the rate of net dividend distributions in 2005, then to a level roughly 1/6th above its trend rate during the following three years. France has not experienced significant modifications in taxation leading to this type of optimization. Now, in a stable and progressive system of taxation, dividend payments exhibit a much smoother profile than the level of economic activity and the rate of profit margins. Moreover, numerous investment funds, particularly pension funds, favour companies that offer a dividend flow. Criteria of immediate return on investments become more imperative. In the equity market, the dividend yield, which is to say the ratio of the dividends to the market value of the enterprise, is scrutinised. More generally, in a world of minority and financial shareholders, the level of dividends tends to follow the level of owners' equity. Confronted with an increase in asset and equity values non-financial corporations can only maintain shareholders' dividend yield by increasing the dividend distribution level.

Let us therefore consider the dividends/equity ratio, defined as the ratio of net dividends and other property income (i.e. net distributed income of corporations) over net owners'

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[3] Pamies-Summer (2008) and Castex (2011) already stressed this phenomenon for the period leading up to the Great Recession.

[4] In the case of non-financial corporations under a partnership status, dividends may also be a direct means of paying partners in the firm. This is particularly the case in Germany where a large majority of small and medium-sized firms operate under this status, and the dividends paid to these partners are taxed as earned income and removed from the corporate tax base. In fact, structurally in Germany, a share of the profit margin, as well as property income, overlap remuneration for partners' labour. This status is marginal in France among non-financial enterprises. Consequently, a direct comparison of the level and even the evolution of net distributed property income between France and Germany is hardly relevant.

equity. For France, the data for the whole set of variables required for the calculation are available from 1996 onward. Figure 10 shows that this ratio is practically flat over the 1996-2011 period. The general policy of generous dividend redistribution thus makes it possible to maintain the dividend/equity ratio even though the economic or financial profitability deteriorates.

Figure 10: Stable yield on owners' equity.
Annual net distributed property income as a percentage of owners' equity.
French NFCs, current prices, 1996-2011.
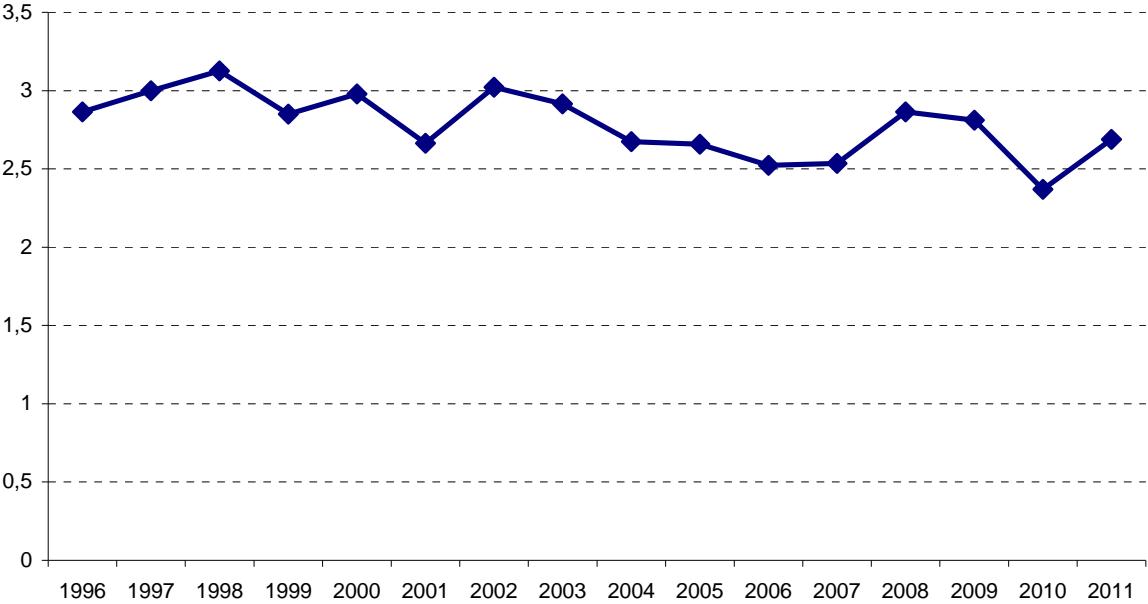
Sources: Author's calculations using the INSEE national accounts (semi-final 2010, provisional 2011) and balance sheet variations.

Thus, to satisfy their capital providers in the context of a land and real estate "bubble", non-financial corporations are forced to pay "jumbo dividends". If their level relative to value added had remained where it stood in 2002, the maintenance of the dividend/owners' equity ratio would only have required the net payment of 65 billion euros in dividends and other property income distributions as opposed to the 90 billion observed in 2011.

The lack of data prevents to verify this mechanism for other Eurozone countries. Again, housing inflation does not necessarily imply rises in prices of commercial and industrial real estate. In Finland for which we have partial balance sheets for non-financial assets, between 2000 and 2008, the share of net distributed property income in the NFCs value added (at factor costs) raised from 8.3% to 9.5%, consistently with the larger value of buildings and structures (table 6); but this ratio falls to 8.6% in 2011.

In total, when adding the surplus dividends and additional investments costs, the high level of land and building prices represent an excess service charge of 45 billion euros in France for the non-financial corporations alone. This bill weights nearly 4.5% of the value added at factor costs of non-financial corporations. This magnitude is the equivalent to 30% of employers' actual social contributions and charged to NFCs in 2011, which is also about

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twice the amount resulting from the increase in the unit labour costs (about 23 billion euros according to the provisional national accounts). Let us recall that this estimation takes into account only part of potential surcharges for firms and other deleterious mechanisms.

Conclusion

Reducing structural differentials in competitiveness is a crucial key for the future of the Eurozone. This requires a thorough diagnosis of their sources. Our paper stresses that the mirror image of different trends in property prices may be massive diverging prices of lands and buildings for firms. Our evidence suggests that the large increase of the prices of these assets during the 2000s has had a large impact on French non-financial corporations: at least 4.5% of their value added at factor costs per year; this charge includes the additional costs of investments and surplus dividends paid due to higher nominal equity value, but it does not include a variety of negative externalities. Conversely, the partial recovery of the external position of Spain or Ireland may potentially be partly explained by the plunge in non-financial asset prices as a consequence of the bursting of real estate bubbles.

Therefore, a policy aiming at reducing prices of non-financial assets, especially of lands, should dramatically improve the economic margins of firms in countries such as France. For example, state or local communities might propose lands to new entrants and incumbents firms at modest prices. Industrial public schemes for closing plants can also ensure a rapid conversion and sale of abandoned lands.

The mechanisms explored in this paper may also concern the analysis of inequality. In some countries, the growth of wealth, and associated inequality, may be largely based on an over-valuation of firm equity. Income inequality has also deepened since dividends are a significant share of the resources of high-income earners. On the contrary, we could expect that a decline of the value of non-financial assets of firms to their value at the eve of this century would reduce both wealth and income inequalities.

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Appendix: some remarks on wages and labour costs indexes

Eurostat, OECD and national sources provide a variety of indexes of wages or labour costs. In general, these indexes report quite similar trends but there are also sometimes large differences. The case of French manufacturing is illustrating. Table A.1 gives the nominal increase in hourly labour costs according to the European Labour Costs Survey (ELCS, Eurostat), the annual Labour Costs Index (LCI, Eurostat), the national accounts (Eurostat, OECD or EU-Klems) and the Structural Business Statistics (SBS, Eurostat).

**Table A.1 Increase of hourly labour costs in manufacturing 2000-2008 NACE 1.1,
according to various Eurostat sources. In %**

	France	Germany
ELCS	38	17
LCI	31	19
SBS (2000-2007)	23	17
National Accounts	29	18

While stats for Germany draw similar trends, statistics for France seem inconsistent. This is not surprising that the French employers' organization MEDEF and the employers' research body COE-Rexecode choose the ECLS logs for claiming that labour costs dramatically increased in France.

How to explain such larges differences for France but not for Germany?
   a. Different concepts of labour costs. National accounts and SBS add wages, salaries and social contributions. LCI and ELCS add other costs. ELCS retain a large range of costs, including taxes on wages and spending for training. However, the differences in concept can explain up to 2 points of the delta in trends. Wages and salaries remain the main drivers of labour costs.
   b. Different concepts of Manufacturing. *A priori*, National accountants should use the concept of "branch", while business statistics are "sector" based. While French accountants exploit complex matrix for computing branch national accounts from business sources, the German *Destatis Quality Report* specifies: "For a subject-related representation of the economic structure in a breakdown by industries, the local kind-of-activity units should be used. Because of restrictions in the source statistical data, national accounts in Germany generally use the enterprise as a unit of analysis. The units are grouped according to their main activity into industries which, consequently, may still include secondary activities." So, this is not surprising that business statistics and national accounts report similar stories in Germany but potentially different ones in France. The consequence is the non comparability of national accounts by industries. This should bias economic diagnoses. For example, using national accounts probably overstates the decline of French manufacturing (NACE 1.1) compared to Germany (figure A.2). In order to avoid these caveats, this paper uses only data for a large sector (business sector or NFCs) rather than data for specific industries.

**Figure A.2 Value added of the French manufacturing as a share of German manufacturing
Eurostat National accounts *versus* Structural Business Statistics (current euros) 1999-2008**
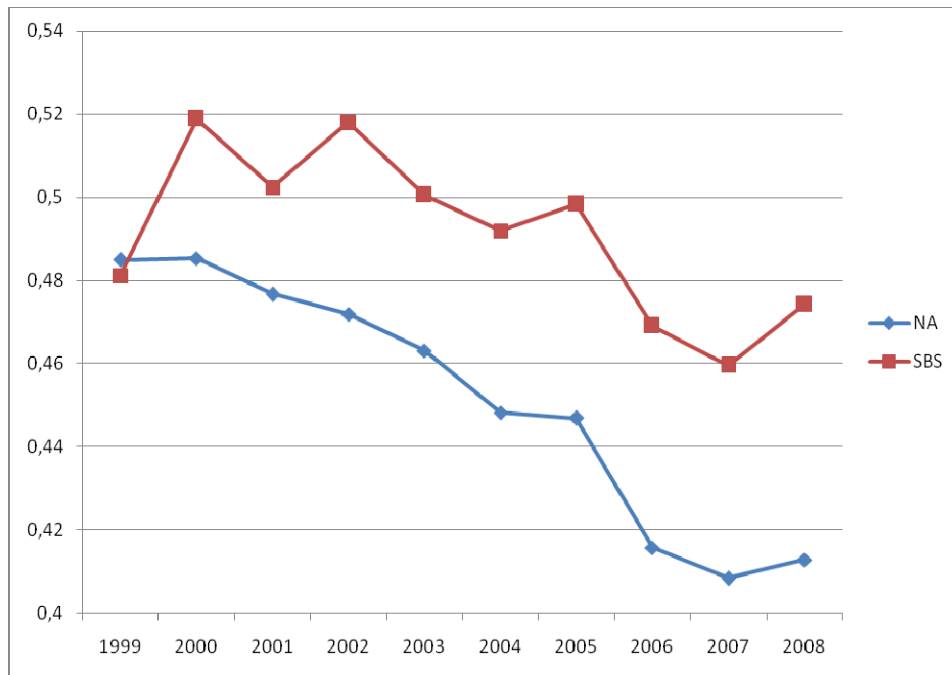
c. Quality of the data. For example, the beginning of the century was a complex period of transition for the implementation of the 35-hour workweek in French firms with 20 or more workers. The result was an increasing risk of measurement errors. The 2000 ELCS survey is particularly concerned: the published results from this survey are not reliable and probably under-estimate the hourly labour costs in 2000; thus the increase in labour costs between 2000 and 2008 is overstates[5]. So we do not use these data and prefer the LCI for the whole business sector.

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[5] Following Askenazy (2012), the INSEE has just recommended avoiding using this dataset. See
http://www.insee.fr/fr/themes/detail.asp?ref_id=ir-ecmo2008&page=irweb/ecmo2008/dd/doc/comparaison.htm