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The role of financialisation in the geography of European structural change

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The Role of Financialisation in the Geography of European Structural Change

1. Introduction

The emergence of a multifarious service-sector along the development path of an economy is a well-known macroeconomic phenomenon. While terms as “post-industrialism” or “tertiarisation” refer to the increasing importance of services together with the progressive decline of industry as the driving force of economy, in recent years scholars have added to this nomenclature the concept of “financialisation” so as to emphasise the pivotal role that finance has come to play in the framework of a service-economy.

Studies about the ascent and the salient features of a finance-economy typically focus on the United States, where the phenomenon stands out in a particularly sharp relief. Krippner (2005)¹, among others, carefully documents this structural adjustment not only through employment and GDP shares – as it is usually done – but focussing more specifically on profit shares. From the point of view of employment, the most striking fact since the post-war era is the unrelenting rise of non-financial services at the expense of manufacturing, while finance has been only moderately growing. In terms of GDP, however, the financial sector development is much more pronounced and parallel to that of services and, more interestingly, it is finance - much more than services - the sector that in terms of profit has eroded the hegemony of manufacturing.

The case of the European countries has until now attracted much less attention. This paper aims at providing a first overview of the European situation, not only considering the single countries by themselves but trying to link their specific evolution to that of the whole area. The standpoint from which “financialisation” is analysed is macroeconomic in the sense that, as in the contribute by Krippner, it interprets financial-dependence in terms of employment, value-added etc. as one would do with any other productive sector, instead of concentrating on the specific characteristics of the financial markets, as is generally done in the most recent economic papers on finance and real economy.

The three main categories on which this work focuses are: industry, non-financial services, financial intermediation and real estate (a category frequently referred to with the acronym “FIRE”). “Industry” includes not only manufacturing, but also mining and quarrying as well

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¹ Krippner G. R. (2005), “The Financialization of the American Economy”, *Socio-Economic Review*, 3(2), 173-208.

as energy and water supply. It represents a more comprehensive category than manufacturing alone, but quantitatively the gap between the two is very limited and only significant in the case of Norway. “Non-financial services” are composed of trade (wholesale and retail) – which is implicitly neglected by Krippner, for instance – transport, storage and communication, hotels and restaurants, public administration and community services, and activities of households². Data therefore incorporate also the government sector. Agriculture and construction are, on the contrary, excluded by the analysis (which explains why value-added shares, for instance, do not add to unity).

The present study covers all the major European countries - without respect to European Union membership. Very small economies as Luxembourg, Malta and Cyprus are not taken into account nor are some Eastern countries for which data collection would have required other sources than Eurostat and OECD statistics, thus generating problems of data comparison. Not every country in the sample provides statistics on each of the variables here considered: this explains why the number of countries in tables and figures may vary. Due to space limitations only values from single years have been reported (usually 1995 and 2009, years in which the data are complete for most countries). As a general remark, when data concerning a more distant past or a longer time horizon are mentioned, it must always be understood, for all the tables here provided, that we are referring to the same dataset and to the same elaboration of row data indicated in the corresponding relevant table, although the specific information have not been included in it. Note finally that in the tables countries are ordered according to a geographic categorisation, which also corresponds quite well to a criterion of economic affinity, as will become clear in the following.

2. Industry Decline and Tertiarisation

Unfortunately, even for the least sophisticated statistics, like those regarding employment and value-added, we do not possess time series as long as those available for the U.S. economy (at least not provided by one single source). For the purpose of this study, however, this does not constitute a serious drawback as the structural evolution of the European countries has followed that of the U.S. with a certain delay. Much more inconvenient will be data-incompleteness for certain countries at a more disaggregate level, as we shall see in the following.

² This class essentially consists of undifferentiated goods and services producing activities of private households for own use.

While in the United States the shift from a Fordist regime of physical capital accumulation and industrial production to a service- and, more specifically, finance-driven economy has become evident already in the Eighties, the decline of industry inside the European borders is a relatively recent phenomenon. Its magnitude appears nevertheless quite significant.

To see this, we report in Table 1 the shares of total value-added of industry, non-financial services (in the following, “services”) and FIRE. For the time being we will focus only on the first three lines of the table. The third one (“FIRE+OBA+O”³) corresponds to what is labelled “Financial intermediation; real estate” on the Eurostat website under “National accounts by 6 branches” according to the former NACE Rev. 1.1 classification. As we shall see, however, this is a highly deceiving label, which has been corrected in the new classification NACE Rev. 2. The recent introduction of this latter makes it possible only a comparison among the whole sample of countries from the year 2000 onwards, so that for a first assessment the old series have been used⁴. For ease of exposition, in the remaining of the section let us call this third category “generic FIRE”.

Considering value-added time series, the relative weight of non-financial services within the single economies fluctuates around 40% and 50% of total value-added and, with the exception of transition economies like Bulgaria and Romania, has remained remarkably stable over the last twenty years. This still holds true for countries for which longer series are at disposal: since 1971 in the Netherlands the percentage of services has constantly been 45%, 50% in Denmark; in Switzerland and Austria it has remained respectively around 50% and 46% since the late Seventies; over the same time period, the average in Sweden was 47%, while Finland and Iceland have been oscillating over the last thirty years between 40% and 45%. In Spain, on the contrary, since 1980 services have been rising from 40% to 50%, whereas in France and the United Kingdom they have been growing over the last four decades from 40% to 45%⁵.

For every country, the typical figure is that of a high and almost flat line for services and, beneath it, the industry and “generic FIRE” curves intersecting at some point in time in a scissor-wise picture. For the richest countries the crossing point is generally to be observed in the Nineties, whereas for many Eastern economies the two curves tend to intersect, but have

³ “OBA” stands for “other business activities” and “O” generically for “other components”.

⁴ The table reports as first value that of 1995, since by that date statistics are complete for the vast majority of countries also as far as the other indicators which will be mentioned in this study are concerned. Moreover, this choice simplifies tables comparison. References to a more distant past for countries that provide the relevant information are to be found in the text.

⁵ Since we are referring to the whole Eurostat time series for the single countries and not only to the three years of Table 1, between the data of this latter and the text there can be some small discrepancies, that are often merely due to a rougher approximation than that used in the table, as we are speaking of decennial trends.

not yet done so. The most impressive and earliest example of switching between industry and “generic FIRE” is offered by France, where in 1980 both sectors accounted for 24% of the total gross value-added, while now the percentage of the former is around 12%, that of the latter around 35% (Tab. 1). This reversal even anticipated that in the United Kingdom, where the crossing point is 1997 with a sharp drop of industry from 35% in 1971 to 15% in 2010 and a rise of “generic FIRE” from 15% to almost 35%. Another example of early switch are the Netherlands, gone from 28% of industrial share in the early Seventies to less than 20% from 1998 onwards, while “generic FIRE” rose from 13% to 28%, surpassing the former in 1993. In Belgium too the shift took place before 1995, although earlier data are not available. For other countries the mutual replacement of the two sectors has not been as early or as dramatic. In Denmark, for instance, though “generic FIRE” surpassed industry in 1987, the gap has remained narrow (the latter has been stable at 20%, slightly declining only in 2009-2010, while the former has grown from 16% in 1971 to 27% in 2010). The situation is not very different in Sweden, where both sectors have been sharing almost the same percentage over all the Nineties. In Germany the two lines crossed in 1993 but the gap is still around 5 percentage points (except in 2009). Austria and Switzerland display a common trend, since industry there declined from 30% to 20% in forty years and “generic FIRE” has risen from around 10% to little more than 20%.

Though not reported here for reasons of space, the picture emerging from employment data is qualitatively not very different. Being particularly labour-intensive, services appear to be more important in terms of employment than value-added (from 5 to 10 more percentage points on average), while the importance of “generic FIRE” as well as industry tends to decline due to their higher dependence on capital. The most interesting pattern emerging from this imperfect overlapping of value-added and employment shares is that the crossing point between industry and “generic FIRE” is shifted in time, meaning that the earliest symptoms of structural change have been on the side of relative price adjustments and/or labour productivity rather than simply a sectoral expansion/reduction in terms of workplaces.

Figure 1 provides a diagrammatical representation of the respective evolution of European countries as concerns value-added dependence on industry⁶. From the values reported in Table 1 for the year 1995 and 2009 respectively the average percentage of value-added produced by industry for the whole sample in the year considered has been subtracted and the differences divided by the standard deviation. This way, one measures country dependence

⁶ Country codes in the figures are given accordingly to the official nomenclature ISO 3166-1, reported in Table 6.

not as an absolute value but taking into account the general (declining) trend experienced by the whole area, passed from an average value-added share of 26% to 21%. The north-east quadrant clusters countries that were and still are the most dependent on industry; the south-east one those once more than average dependent on industry but now with under-average shares; in the south-west one sees countries that were and remain under-average and, finally, in the north-west those that are passing from under- to above-average positions. If we consider only the 45-degrees line, those on its left-hand side are economies that from 1995 to 2009 have been shifting towards industry, whatever their relative situation was at the beginning, while those on the right-hand side have become less industrial⁷. We see, for instance, that Italy, Spain, France and Belgium are the economies traditionally less industrial - according to this specific indicator (Greece data are not available for 1995) – that have further descended in the ranking. Among the countries that were relatively industrial-orientated, the most significant decline has been that of the United Kingdom. Eastern countries maintain their traditional industrial profile, although with some downwards adjustments, excepting Hungary and, more notably, the Czech Republic, which nowadays has the highest industry value-added share after oil-producing Norway. Also in Germany, Switzerland, Austria, Denmark and the Netherlands industrial orientation has become sharper over time.

3. The Black Box of Financial and Financial-Related Services

As mentioned above, however, we must partially mistrust these results as far as the “financial side” of the economy is concerned. Checking at a higher level of disaggregation, one can in fact easily discover that “generic FIRE” consists of many heterogeneous categories. Specifically, it includes, besides “financial intermediation” and “real estate activities”, “renting activities of machinery and equipment without operator and of personal and household goods”, “computer and related activities” (such as consultancy, data processing etc.), “research and development” as well as a residual class “other business activities”, that ranges from legal and accounting activities to business and management consultancy, from advertising to engineering activities, technical testing and so on. It is therefore evident that more than representing the financial side of the economy, this all-encompassing indicator stands for a vast range of highly specialised services, independently of their connection to the paper- or to the real economy. The proliferation of legal and auditing activities, for instance, represents from many points of view a by-product of financialisation (increasing number of listed companies, increasing complexity of financial transaction etc.), but cannot be *sic et*

⁷ All other subsequent diagrams of this kind have to be interpreted in an analogous way.

simpliciter confused with it, although in the scenario of a slump of the financial industry these sectors are also likely to experience severe losses. Renting activities other than real estate, then, include many services that are not only related to private consumption but to industrial production in a broad sense (like renting of transport and machinery equipment, but the same applies to “computer activities”) reflecting the tendency towards outsourcing in the manufacturing sector⁸. This means, on the one hand, that our measure of “non-financial services” is very conservative and likely to be related to activities characterised by a rather low level of value-added. On the other hand, it shows that the importance of industry in a broader sense than just physical production is understated.

Being particularly interested in the evolution of the financial sector, in the following of the analysis we shall focus on “financial intermediation” and “real estate activities” (“FIRE”) – aggregated, as often done in the literature, or disaggregated depending on the need – considered as the genuine financial side of the economy – or at least a conservative proxy of it – and will also devote some attention to “other business activities” (“OBA”), while leaving aside the minor components of “research and development”, “computer activities” and other “renting activities”. Though lacking of exactness, for sake of clarity we will continue to refer to non-financial, non-sophisticated services simply as “services”.

Table 1 reports in the last two lines the disaggregated values of FIRE and, as an even more conservative measure of financialisation, that of financial intermediation alone (“FI”). The picture emerging from this more accurate classification seems to speak much less in favour of the financialisation hypothesis than before. The first aspect to consider is that the marked similarity with the American case has totally vanished. U.S. studies are already based on the right disentangling of FIRE and other business activities because of the different coding system of the original data. Therefore, the scissor-wise pattern for industry (or manufacturing) and finance holds true, whereas in European it was partially an artifact of clustering spurious components.

The second aspect relates to the respective weight and evolution of the three main components of “generic FIRE”. Though each country has its own history, two features are common to all of them. First, financial intermediation displays little, if any, variation. Its weight within the overall economy remains remarkably stable, around 5% of total value-added. The United Kingdom has experienced one of the most significant increases in the FI share, from 5% in the Seventies to almost 9% in 2004. This peak had already been reached in

⁸ More specifically, the rise of sophisticated, financially - as well as industrially - oriented services is probably related to the increasing complexity of big and/or multinational enterprises.

the middle Eighties: afterwards the trend inverted to increase again from 2000 on. Ireland as well as Iceland, though the time series are considerably shorter, have increased from 5% to 10% over the last twenty years. But apart from these three cases (and Romania, where the FI share collapsed from almost 7% to 2% over the same period), the increase is null or restricted, as happened in the Netherlands or Denmark, to 2 percentage points. It can be questioned whether such an increase may already be regarded as quite significant due to the relative small macroeconomic size of the sector considered. Nonetheless, what is clear is that in value-added terms, for virtually every European country, financial intermediation is, instead of a rapidly ascending sector, a rather stationary one.

This does not entirely apply, however, to real estate activities. Real estate by itself accounts on average for around 7-10% of total value-added (Eurostat). For some countries, like the United Kingdom, data are not provided, and for many others the evolution of this sector can be tracked only since the Nineties. But a more or less strong upwards tendency often emerges, as in the case of Austria and Finland since the Seventies. Among countries with shorter time series, Italy, France and Spain (Portugal – were data available – would also probably count in this group) show a clear increasing trend, which is much less pronounced in Germany.

The conclusion, maybe surprising, of this disaggregation is that, at the end, much of the dynamics detected in “generic FIRE” is to be attributed to “other business services”, often together with real estate activities.

Another important indicator that measures the sectoral dynamic of an economy is that of value-added per hour worked. Tables 2 and 3 report the ratio of this measure for financial intermediation, real estate and other business activities to the equivalent measure for industry. A number higher (smaller) than one means that the value-added per hour worked in that sector is higher (lower) than that of industry. Table 2 reports separately the three sectors (FI, RE, OBA), while Table 3 aggregates FI and RE, without doubling the information regarding OBA. As one can immediately see, only for very few countries is it possible to calculate this index for the whole time period and for all three sectors. The disaggregation between FI and RE allows us to disentangle the evolution of these two subsectors of the financial industry in a broad sense, as they are often intertwined and easily characterised by a speculative nature. It is also convenient since for several countries only data concerning financial intermediation can be recovered and this explains why the number of countries in Table 3 shrinks.

Perhaps surprisingly, neither in the value-added per hour worked is it possible to discover a significant upwards trend of the financial industry. If financial intermediation alone is taken into account, then only the Mediterranean countries (Italy, Spain and - maybe - Portugal)

display a clear take-off of finance with respect to industry. For all other countries the picture emerging is that of a stable, if not declining, relationship, which means that value-added per hour worked in industry has at least increased not less than in financial intermediation. Compared to real estate activities alone, industry has more clearly gained in the last twenty years.

If we now combine FI and RE, industry has kept its relative position in almost all countries of the sample: in Czech Republic and Romania it has improved it, as well as in Denmark (and Norway, which is of course not surprising) while only in Finland can an increasing tendency in FIRE be detected. The situation regarding other business activities and industry is more unclear, but in general this service category tends to remain stable or slowly lose pace, meaning that employment in OBA is increasing faster than value-added compared to what happens in industry (reflected in a constant or declining index in Table 2), although from the previous analysis, based purely on sectoral shares, OBA has revealed itself a very dynamic component of the structural change underway.

4. The Picture Emerging from Profit Shares

Another valuable indicator in order to assess the sectoral structure of an economy is that of profit shares⁹. This measure may be particularly relevant when considering the financial industry, due to its intrinsically capitalistic nature.

From this perspective, European countries are more diversified than when only analysed through GDP or employment-lenses. Data are taken from the OECD database, which unfortunately restricts the countries sample and is afflicted by the same deficiency of long time series as the Eurostat statistics. Nevertheless, some interesting features do emerge.

The data of seven countries date back to the Seventies: Austria, Denmark, Finland, France, Italy, Netherlands and Norway (as partial reference for the years reported take Table 5). Both Finland and Austria are countries where industry, from a profit-point of view, has known no decline whatsoever: in Finland its share is a stable 30%¹⁰, in Austria it fluctuates between 20% and 24%. In Denmark it has been considerably growing passing from 15% to almost 30%¹¹ in forty years, while in Norway, thanks to the oil industry, the increase has been even more impressive, from 20% to 60% in 2008. On the contrary, in the Netherlands there has

⁹ The variable employed is “gross operating surplus and mixed income” (“GOPS”), which measures the surplus or deficit from production before accounting for rents and interest payments, also including the remuneration of the self-employed. “Gross” means before taking account of consumption of fixed capital.

¹⁰ The industry share dropped only in the last years. Caution has to be used when considering it, since it happened already in the early Nineties but afterwards the situation reversed.

¹¹ In year 2008.

been an early increase over the Seventies-Eighties which has then rapidly deflated, with a profit share between 20% and 25% over the last two decades. France and Italy share the same pattern: a stable percentage of respectively 20% and 25% during the Seventies-Eighties followed by an unremitting decline of ten percentage points since the Nineties, joined with a rise in services before 1990. Other countries that have been experiencing an erosion of industrial profits over the last two decades are the United Kingdom, Belgium, Spain and Portugal.

What is more interesting, however, is not merely a comparison of absolute shares, since we already know that the general tendency of the European economy is that of a decline in industry so that a smaller share might simply be due to shrinking activities (like the shutting down of a plant in order to shift production to China with loss of workplaces and profits in the home country). A crucial question is whether the industrial core kept in Europe has become more or less profitable when compared with finance. For a first assessment one can take the ratio of profits per hour worked in industry and financial intermediation (although this indicator cannot be calculated for several countries where no data are available, like in the case of the United Kingdom). As shown in Table 4, in Spain, Italy and Portugal financial intermediation has become more and more profitable with respect to industry, but the reverse is true for almost all other countries considered. The decline is particularly evident in the case of Germany and Austria, where financial intermediation is now even less profitable than industry.

5. The Pattern of Financial and Industrial Dependence in the European Countries

In this section we will try to outline the sectoral profiles of the single European countries not in absolute terms but with respect to a common benchmark (as we did in Section 2). To perform this exercise, profit shares seem to be the most valid instrument since through them countries peculiarities emerge more clearly, although it is good to keep in mind what we have already learnt from other indicators. The relevant data are those reported in Table 5 and Figure 3 (for the interpretation of this latter see the explanation regarding Figures 1 and 2).

Although Italy from the point of value-added and employment shares can still be described as more industrial than France (Tab.1, Fig. 1) the profit structure reveals a marked affinity between the two countries (Tab. 5). They are both characterised by an under-average share of

profits in industry¹² (France was and remains the last one in the sample and Italy experienced a sharp decline, see Fig. 3.A) as well as by a very high share of real estate activities (in 2009 only Finland had a similar percentage, as indicated in Fig. 3.C). With a very low and over time decreasing profit share in industry there are Belgium and Spain as well. Unlike Italy and France, their share in financial intermediation is above average, higher and more rapidly increasing in the case of Spain than Belgium (Fig. 3.B). The main difference between the two countries is the high significance of the sophisticated OBA for Belgium (Fig. 3.E), while Spain remains much more dependent on generic services (Fig. 3.D). This latter category is particularly important for Portugal as well, which is also not particularly industry-oriented and which shares with Spain a very clear upwards trend in financial intermediation. For Greece only data from 2000 onwards are available, so that it is included in the table but not in the graphic. Its profile is however very neat: an inflated service sector that dominates a non-industrial economy, as reflected not only in the industry share of profits but also in the almost null contribution of other business services to total profits.

Then there is what can be viewed as the industrial core of Europe: the continental countries (indicated as “Continental countries 2” in Tables 1, 2 and 5, in order to distinguish them from Belgium and France) together with their Eastern periphery and the Scandinavian nations.

Austria and Germany are countries where industry is resurging, crowding out financial services. The Netherlands maintain a significant profit share in industry (significant especially for a rich country, whose natural evolution is always, up to a certain limit, that of a departure from industrial activities) while in the meantime the financial sector is rapidly expanding (but real estate activities are not). Then there are the Eastern countries, with a distinct industrial profile and a service sector still more oriented towards generic services than finance, as one would have expected given their current level of development.

Among the Scandinavian countries Norway is obviously greatly unbalanced towards industry because of the mining sector but has contemporarily developed to be one of the most financialised countries (together with the United Kingdom, Ireland, Denmark, the Netherlands, Spain and Portugal) in profit-share terms. Denmark is also a country where industry is regaining a prominent place and where financial intermediation is growing at the expense of generic services. These latter are, on the contrary, rising in Sweden, which started from a comparatively very low share and OBA are gaining ground as well. Industry has

¹² When interpreting this kind of data, one should however keep in mind the information from value-added data, since differences and similarities in profit shares might be due to different ratios of capital and labour shares within each economy.

slightly declined but the same has happened to financial and real estate activities (Tab. 5). In Finland the decline of industry indicated by the 2009 data-point alone may be deceiving (see footnote 10) and, while financial intermediation has slightly decreased after a rise in the Eighties, the real estate sector is expanding.

Three “financialised” countries *par excellence* are left: United Kingdom, Ireland and Iceland. Of those, Iceland has experienced a dramatic boom and bust of financial intermediation, begun at the end of the twentieth century and suddenly ended by the global financial crisis: unfortunately, this abnormal, aborted attempt of structural change cannot be captured by data for 1997 and 2009 as reported in Table 5. The case of the United Kingdom is much more interesting: still in 1995 it would have been considered – from a profit-share point of view – a clearly industrial country and, though its position in the last years has worsened, it is still in a better position than France, for instance. Actually, as already mentioned in a footnote, here the difference lies all in the relationship between capital and labour shares. In value-added and employment shares, the two countries are perfectly comparable (see Tab. 1), whereas in the United Kingdom capital has been able to take advantage of deindustrialisation more than in France. Financial intermediation has been growing in Ireland similarly to the United Kingdom but here the great weight of industry seems to indicate the typical profile of a peripheral country where manufacturing is offshored from the “fatherland”.

Another possible standpoint from which it is possible to analyse economic dependence from one sector is, of course, trade. Due to space limits we do not report trade data. We limit ourselves to few considerations. Eastern countries together with Italy and Spain tend to have a negative balance in both financial and other business services, while France, Portugal and the Netherlands display negative net exports only in this former category. The fact that these countries are contemporarily characterised by a productive structure quite oriented towards finance deserves consideration. On the contrary, for countries like Switzerland, the United Kingdom and Ireland not only is the balance positive, but financial services account for 20-30% of total exports in services, whereas for all other countries the percentage lies between 1% and 7% in 2009¹³. Concerning other business services, Belgium, Germany, Austria, the Netherlands, the United Kingdom and Ireland have all high export shares. The same is also true for the Eastern countries, but their balance in this sector is, on the contrary, negative.

¹³Data are taken from the *EBOPS 2002* dataset (OECD). The percentages of financial services mentioned in the text include insurance services, separately indicated in the dataset.

6. Concluding remarks

This paper represents a first contribution to the debate about the role of the financial industry within a service-economy and its interactions with deindustrialisation in Europe. The evidence here provided is far from exhaustive: many other indicators may and ought to be considered (like capital investment, debt-ratios in the private sector among others) and the research may be further enhanced through more specific decompositions of the time series presented in order to disentangle various effects (like industry decline due to changed level of labour intensity versus overall decline etc.). Nevertheless some conclusions may already be drawn.

First of all, Europe is different from the U.S. Jorgenson and Timmer (2011)¹⁴ show for instance how in Europe real value-added per hour worked in financial and business services has remained constant since 1980, while in the U.S. it began growing in the late Nineties. Their study, however, only considers Europe as a continent and aggregates financial and business activities in the same category, which, as we have seen, may be problematic.

Secondly, this paper poses the question of a proper identification of the financial side of an economy: to what extent is it appropriate to focus on real estate together with financial intermediation, given their sometimes divergent development and how should be weighted business services when discussing the relations between real- and paper-economy?

Thirdly, it offers an overview of the single European countries and their relative evolution. Although deindustrialisation appears to be a common feature, industry might be in a better shape than raw data seem to suggest. An accurate investigation by Tregenna (2009)¹⁵ on the decline of manufacturing worldwide questions the notion of deindustrialisation as based primarily on employment data and, by applying some decomposition techniques which account also for the falling labour intensity in the sector, casts doubts on the alleged deindustrialisation of several European countries.

More generally, this paper may help in rationalising the map of Europe from a productive point of view. The industrial stronghold in Europe is represented by the German-speaking countries together with their Eastern and Scandinavian neighbours, while the Western and Mediterranean belts including France and Belgium appear to be increasingly oriented towards finance. Given the great uncertainty that at present surrounds the political future of Europe, a better understanding of the geographic pattern of its economic development is undoubtedly a subject that requires urgent attention and further research.

¹⁴ Jorgenson, D. W. and Timmer, M. P. (2011), "Structural Change in Advanced Nations: A New Set of Stylised Facts", *Scandinavian Journal of Economics*, 113(1), 1-29.

¹⁵ Tregenna, F. (2009), "Characterising Deindustrialisation: An Analysis of Changes in Manufacturing Employment and Output Internationally", *Cambridge Journal of Economics*, 33, 433-466.

Mediterranean countries	GREECE			ITALY			SPAIN			PORTUGAL		
	1995	2000	2009	1995	2000	2009	1995	2000	2009	1995	2000	2009
Industry	-	13.9	13.6	24.8	23.3	18.9	21.9	20.9	15.4	21.9	20.4	16.8
N.f. Services	-	51.8	60.5	43.8	43.8	44.1	48.2	47.0	48.0	46.4	48.0	51.3
FIRE+OBA+O	-	20.6	20.1	22.3	24.6	28.3	17.9	19.5	23.7	19.6	20.3	23.3
FIRE	-	16.8	16.6	15.3	16.0	18.5 ⁽²⁰⁰⁸⁾	12.8	12.8	15.3	-	13.9 ⁽²⁰⁰⁵⁾	
FI	-	5.5	5.5	4.7	4.7	5.4	5.1	4.6	6.6	6.1	5.9	7.7 ⁽²⁰⁰⁷⁾
Continental countries (1)	FRANCE			BELGIUM								
	1995	2000	2009	1995	2000	2009						
Industry	18.9	17.8	12.5	23.2	22.0	16.3						
N.f. Services	43.6	43.7	46.2	44.4	43.7	46.9						
FIRE+OBA+O	28.4	30.7	34.1	25.5	27.8	30.4						
FIRE	-	17.5	19.9	16.3	15.8	15.1 ⁽²⁰⁰⁸⁾						
FI	-	5.2	5.1	6.4	6.0	6.0						
Continental countries (2)	NETHERLANDS			GERMANY			AUSTRIA			SWITZERLAND		
	1995	2000	2009	1995	2000	2009	1995	2000	2009	1995	2000	2009
Industry	21.9	19.3	17.9	25.4	25.3	22.4	22.8	23.2	21.8	23.6	21.8	20.8
N.f. Services	44.9	45.2	46.3	40.2	41.3	42.0	47.2	45.4	45.6	49.1	47.1	48.7
FIRE+OBA+O	24.2	27.3	28.2	26.4	27.7	31.5	19.4	21.4	23.6	18.5	24.0	23.8
FIRE	13.8	14.4	14.2	15.8	15.4	16.0 ⁽²⁰⁰⁸⁾	13.3	13.9	14.0	18.6 ⁽¹⁹⁹⁷⁾	20.6	19.5
FI	6.3	6.1	7.5	4.6	4.2	4.3	5.7	5.6	4.5	11.4 ⁽¹⁹⁹⁷⁾	13.2	12.1
Eastern countries	POLAND			CZECH REPUBLIC			SLOVAK REPUBLIC			HUNGARY		
	1995	2000	2009	1995	2000	2009	1995	2000	2009	1995	2000	2009
Industry	28.4	24.0	24.3	30.2	30.4	29.3	32.7	29.1	25.7	25.0	27.3	25.5
N.f. Services	44.3	45.3	46.2	37.9	40.2	40.3	34.4	37.2	36.7	44.1	43.1	44.6
FIRE+OBA+O	12.6	18.1	18.4	16.0	15.6	17.7	17.4	17.1	19.2	18.7	21.4	23.9
FIRE	2.6	4.9	3.8	10.0	9.0	9.1	13.9	10.6	10.6	11.4	12.7	13.7
FI	2.6	4.9	3.8	3.1	2.7	3.8	5.7	2.4	4.1	4.3	3.8	4.6
Eastern countries	ROMANIA			BULGARIA			SLOVENIA			CROATIA		
	1995	2000	2009	1995	2000	2009	1995	2000	2009	1995	2000	2009
Industry	31.9	29.0	27.0	27.7	21.3	22.1	28.9	29.0	23.3	25.9	23.4	18.4
N.f. Services	24.5	37.2	39.1	28.5	41.2	40.9	40.3	40.4	43.3	41.9	45.6	41.4
FIRE+OBA+O	17.9	16.4	15.1	23.4	19.3	23.6	19.7	20.2	23.3	19	19.4	26.8
FIRE	15.4	12.9	9.8 ⁽²⁰⁰⁸⁾	-	-	-	13.4	12.6	13.0	-	-	-
FI	7.3	4.4	2.3	-	-	-	5.5	4.7	5.1	-	-	-
Scandinavian countries	DENMARK			NORWAY			SWEDEN			FINLAND		
	1995	2000	2009	1995	2000	2009	1995	2000	2009	1995	2000	2009
Industry	20.4	21.3	17.5	29.7	37.8	34.1	25.9	24.5	19.4	28.4	28.4	20.9
N.f. Services	49.2	48.2	48.7	45.3	39.1	39.7	43.7	44.2	47.8	43.1	40.9	43.6
FIRE+OBA+O	22.2	22.3	27.3	17.5	16.9	20.0	22.8	24.9	25.7	19.1	20.9	24.5
FIRE	15.7	14.5	17.8	12.1	10.3	10.2 ⁽²⁰⁰⁷⁾	15.8	14.9	13.3 ⁽²⁰⁰⁸⁾	14.1	14.6	15.2
FI	5.2	4.7	6.7	4.4	3.0	4.5	4.5	4.5	4.5	4.4	4.4	3.0
Baltic countries	ESTONIA			LATVIA			LITHUANIA					
	1995	2000	2009	1995	2000	2009	1995	2000	2009			
Industry	26.3	22.0	19.5	25.8	17.6	14.0	24.5	23.6	20.5			
N.f. Services	42.5	45.3	46.2	45.6	53.3	50.0	45.5	51.1	52.9			
FIRE+OBA+O	18.7	22.4	24.9	15.0	19.1	26.1	12.0	12.4	16.4			
FIRE	13.9	17.2	14.3	-	13.2 ⁽²⁰⁰¹⁾	15.7	10.4	9.3	11.1 ⁽²⁰⁰⁸⁾			
FI	2.2	4.0	3.5	5.0	5.0	6.1	2.1	2.2	2.2			
Insular countries	UNITED KINGDOM			IRELAND			ICELAND					
	1995	2000	2009	1995	2000	2009	1995	2000	2009			
Industry	26.0	22.0	15.0	32.6	34.1	26.5	19.0	17.3	20.3			
N.f. Services	43.4	44.7	44.7	37.5	33.5	40.2	44.5	45.4	42.1			
FIRE+OBA+O	23.7	27.0	33.4	17.5	21.2	27.4	16.1	19.7	25.7			
FIRE	-	-	-	-	15.5 ⁽²⁰⁰²⁾	18.2 ⁽²⁰⁰⁶⁾	-	-	-			
FI	6.6	5.5	8.6 ⁽²⁰⁰⁵⁾	8.1	7.2	9.9	5.3 ⁽¹⁹⁹⁷⁾	5.9	10.2 ⁽²⁰⁰⁵⁾			

Table 1 – Sectoral shares (%) on total value-added of industry, non-financial services, financial intermediation, real estate and other business activities. *Source: Eurostat, National accounts by 6 branches, NACE Rev. 1.1.*

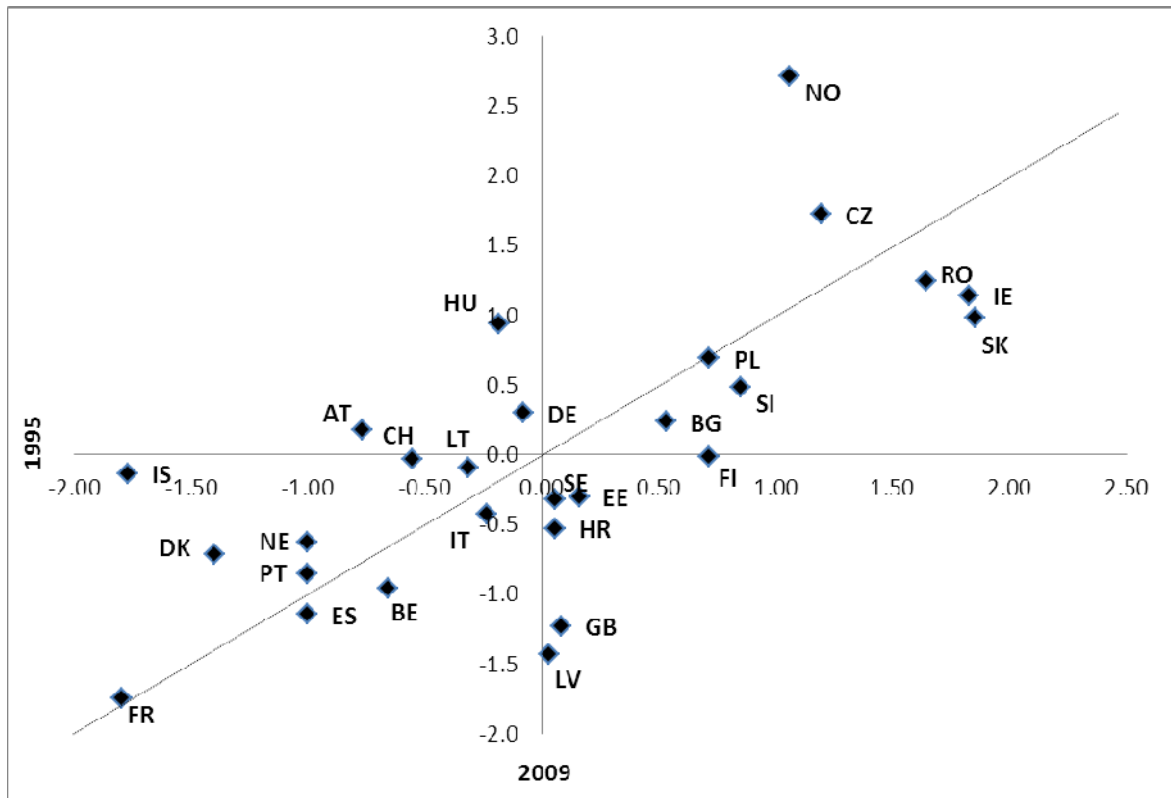


Figure 1 – Evolution of the share of industry on total value-added. Values are standardised with respect to the year mean and standard deviation of the sample considered. *Source:* based on Eurostat, *National accounts by 6 branches, NACE Rev. 1.1.*

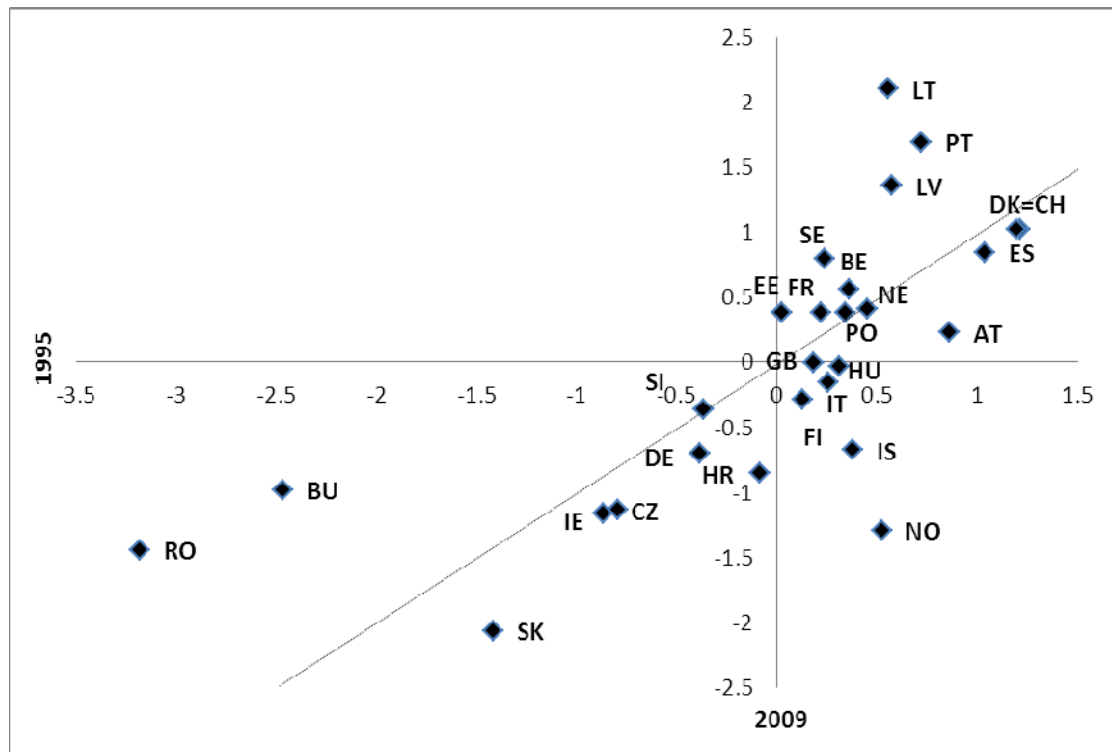


Figure 2 – Evolution of the share of non-financial services on total value-added. Values are standardised with respect to the year mean and standard deviation of the sample considered. *Source:* based on Eurostat, *National accounts by 6 branches, NACE Rev. 1.1.*

Mediterranean countries	GREECE				ITALY			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	-	2.1	2.0	1.9	1.8	1.9	2.1	2.3
RE	-	-	103.3	49.0	-	-	-	-
OBA	-	0.7	0.4	0.3	-	-	-	-
Mediterranean countries	SPAIN				PORTUGAL			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	1.7	1.9	2.0	2.8	-	3.5	4.2	-
RE	16.5	8.2	6.1	-	-	-	19.9	-
OBA	0.7	0.7	0.7	-	-	-	1.0	-
Continental countries (2)	NETHERLANDS				GERMANY			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	-	-	1.5	1.3	1.3	1.0	1.2	1.2
RE	-	-	5.2	4.2	-	-	-	-
OBA	-	-	0.5	0.5	-	-	-	-
Continental countries (2)	AUSTRIA							
	1995	2000	2005	2009				
FI	1.6	1.5	1.4	1.2				
RE	6.4	5.8	5.6	5.1				
OBA	0.8	0.7	0.6	0.6				
Eastern countries	CZECH REPUBLIC				SLOVAK REPUBLIC			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	2.0	1.5	1.7	2.2	3.8	1.2	2.5	2.1
RE	7.4	5.6	4.0	-	7.1	7.6	5.7	7.0
OBA	0.9	0.8	0.8	-	0.3	1.0	0.7	0.8
Eastern countries	HUNGARY				ROMANIA			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	2.1	1.7	2.3	-	-	3.7	2.1	-
RE	-	21.8	19.5	-	-	32.1	20.1	-
OBA	-	1.6	1.2	-	-	1.8	1.4	-
Scandinavian countries	DENMARK				NORWAY			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	1.6	1.4	1.5	-	1.0	0.6	0.7	0.9
RE	7.7	6.3	5.0	-	9.1	3.5	2.2	-
OBA	0.9	0.7	0.6	-	0.5	0.3	0.3	-
Scandinavian countries	SWEDEN				FINLAND			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	1.8	1.8	1.9	1.8	1.5	1.9	1.1	1.4
RE	5.1	5.8	4.7	-	4.5	4.7	4.8	5.4
OBA	-	-	-	-	0.5	0.5	0.6	0.7
Baltic countries	ESTONIA				LITHUANIA			
	1995	2000	2005	2009	1995	2000	2005	2009
FI	-	3.6	4.0	2.0	1.4	1.8	1.8	1.2
RE	-	8.5	9.2	7.7	-	-	-	-
OBA	-	1.2	1.4	1.6	-	-	-	-

Table 2 – Value-added per hour worked in financial intermediation, real estate and other business activities with respect to value-added per hour worked in industry. Index: value-added per hour in industry = 1. (Note: the high values in Greece reflect the small amount of hours worked in the real estate sector). *Source:* based on Eurostat, *National accounts by 60 branches, NACE Rev. 1.1.*

	1995	2000	2005	2009		1995	2000	2005	2009
GREECE	-	6.5	6.2	5.4	NETHERLANDS	-	2.3 ⁽²⁰⁰¹⁾	2.3	2.0
SPAIN	3.6	3.7	3.6	-	AUSTRIA	2.9	2.7	2.7	2.4
DENMARK	3.4	2.9	2.7	-	CZECH REPUBLIC	4.0	3.1	2.7	2.6 ⁽²⁰⁰⁸⁾
SWEDEN	3.4	3.5	3.2	3.0 ⁽²⁰⁰⁸⁾	SLOVAK REPUBLIC	5.2	3.5	3.7	3.7
NORWAY	2.2	1.4	1.2	-	HUNGARY	-	4.8	5.1	-
FINLAND	2.7	3.3	3.0	3.5	ROMANIA	-	8.9	7.2	5.3 ⁽²⁰⁰⁸⁾
ESTONIA	-	6.4	7.1	4.5					

Table 3 – Value-added per hour worked in financial intermediation and real estate activities (FIRE) with respect to value-added per hour worked in industry. Index: value-added per hour in industry = 1. *Source:* based on Eurostat, *National accounts by 60 branches, NACE Rev. 1.1.*

	1995	2000	2005	2009		1995	2000	2005	2009
GREECE	-	2.0	1.8	1.9	NETHERLANDS	-	1.0 ⁽²⁰⁰¹⁾	1.4	1.3
ITALY	1.2	1.6	2.2	2.8	GERMANY	1.7	1.1	1.3	0.6 ⁽²⁰⁰⁸⁾
SPAIN	-	1.8	2.3	4.0	AUSTRIA	1.9	1.5	1.4	0.8
PORTUGAL	-	4.4	5.5	-	POLAND	-	-	2.4	3.3
DENMARK	1.7	1.1	1.3	-	CZECH REPUBLIC	2.0	1.5	1.5	2.3
SWEDEN	2.3	2.1	2.4	1.9	SLOVAK REPUBLIC	5.5	0.8	2.8	2.4
NORWAY	0.9	0.4	0.6	1.2	HUNGARY	2.9	1.9	2.7	-
FINLAND	1.6	2.5	1.1	1.8					
ESTONIA	-	5.4	5.4	2.3					

Table 4 – Gross operating surplus and mixed income per hour worked in financial intermediation with respect to industry. Index: gross operating surplus and mixed income per hour worked in industry = 1. *Source:* based on OECD, *STAN Database.*

<i>Mediterranean countries</i>	ITALY		SPAIN		PORTUGAL		GREECE	
	1995	2009	2000	2009	1995	2006	2000	2009
Industry	22.1	14.0	20.1	14.5	21.2	18.3	12.0	11.9
N.f. Services	37.8	34.4	40.0	38.2	32.0	36.2	44.0	53.2
FI	2.8	4.9	4.3	8.9	7.1	10.5	4.0	4.7
RE	18.9	27.4	15.9	15.5	-	16.4	18.0	18.4
OBA	6.7	7.8	2.8	4.7	-	5.4	3.0	0.2

<i>Continental countries (1)</i>	FRANCE		BELGIUM	
	1995	2007	1995	2009
Industry	15.5	10.9	20.6	14.2
N.f. Services	31.3	30.5	32.0	31.4
FI	3.9	3.7	6.3	6.9
RE	26.7	32.0	21.2	20 ⁽²⁰⁰⁸⁾
OBA	-	7.7	9.9	14.4

<i>Continental countries (2)</i>	NETHERLANDS		GERMANY		AUSTRIA	
	1995	2007	1995	2008	1995	2009
Industry	24.5	22.8	16.6	20.6	20.0	21.7
N.f. Services	34.8	36.6	29.5	30.2	34.3	31.9
FI	7.3	9.2	4.0	2.1	5.6	2.9
RE	15.4	13.4	26.0	26.0	17.8	20.8
OBA	5.3	6.2	12.0	10.0	4.2	6.3

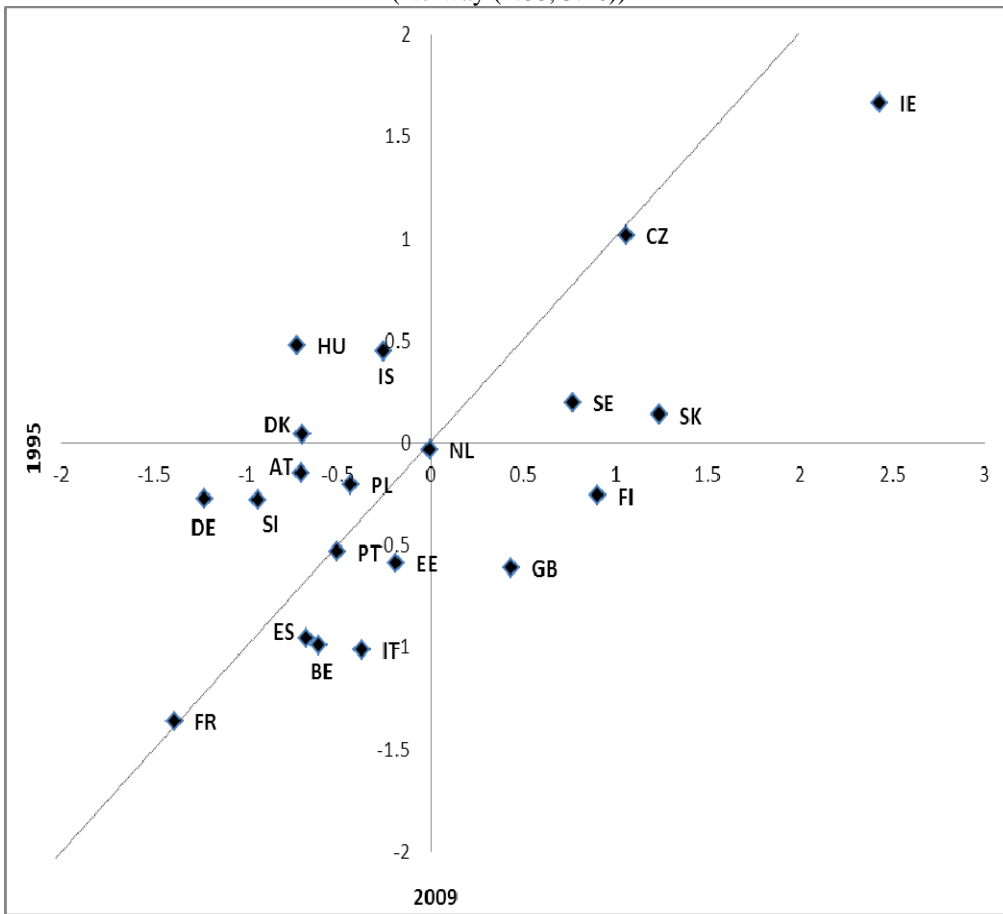
<i>Eastern countries</i>	CZECH REPUBLIC		SLOVAK REPUBLIC		HUNGARY		SLOVENIA		POLAND	
	1995	2009	1995	2009	1995	2009	1995	2009	1995	2008
Industry	31.3	32.1	32.5	24.3	19.8	27.3	18.5	20.6	21.7	21.2
N.f. Services	37.6	34.7	34.1	35.0	35.0	31.6	31.6	32.7	43.0	40.0
FI	3.3	4.3	8.2	4.5	4.7	4.2	8.7	6.3	2.1	6.1
RE	13.0	8.8	14.1	10.4	14.5	16.3	21.5	17.9	-	-
OBA	5.2	5.7	-0.3	5.8	8.0	6.4	3.0	6.5	-	-

<i>Scandinavian countries</i>	DENMARK		NORWAY		SWEDEN		FINLAND		ESTONIA	
	1995	2009	1995	2009	1995	2008	1995	2009	1995	2009
Industry	20.0	23.4	36.7	52.2	29.5	24.8	30.4	20.7	23.3	17.8
N.f. Services	35.3	26.9	28.1	19.4	21.9	30.4	25.9	27.6	30.3	35.2
FI	5.3	9.2	5.3	8.9	6.5	5.1	5.1	3.9	1.6	3.7
RE	24.2	25.4	16.3	15.5	28.1	22.7	19.9	27.8	26.5	23.4
OBA	4.2	2.7	2.2	4.7	3.4	6.7	2.3	4.0	3.0	7.1

<i>Insular countries</i>	UNITED KINGDOM		IRELAND		ICELAND	
	1995	2007	1995	2009	1997	2009
Industry	27.3	17.6	40.2	37.9	22.8	27.1
N.f. Services	28.0	27.9	20.9	19.3	31.6	25.3
FI	6.4	9.9	9.2	11.1	3.5	2.7
RE	18.5	21.6	-	-	16.5	23.9
OBA	7.2	9.5	-	-	3.1	7.2

Table 5 – Sectoral shares (%) on total gross operating surplus and mixed income of industry, non-financial services, financial intermediation, real estate and other business activities.
Source: based on OECD, *STAN Database*.

A. Industry
(Norway (1.88; 3.26))



B. Financial intermediation

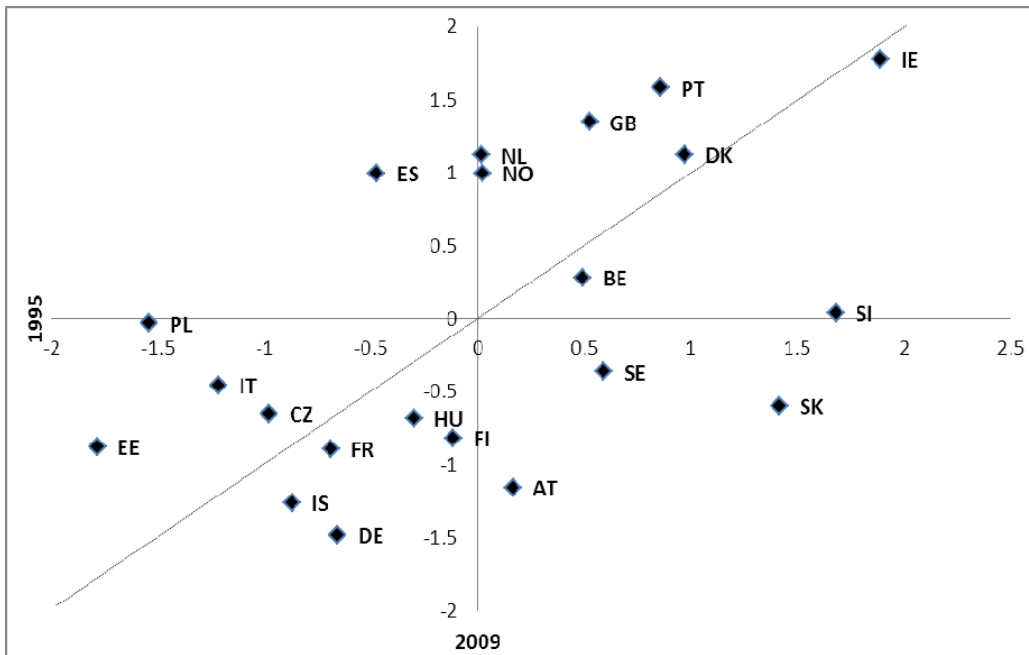
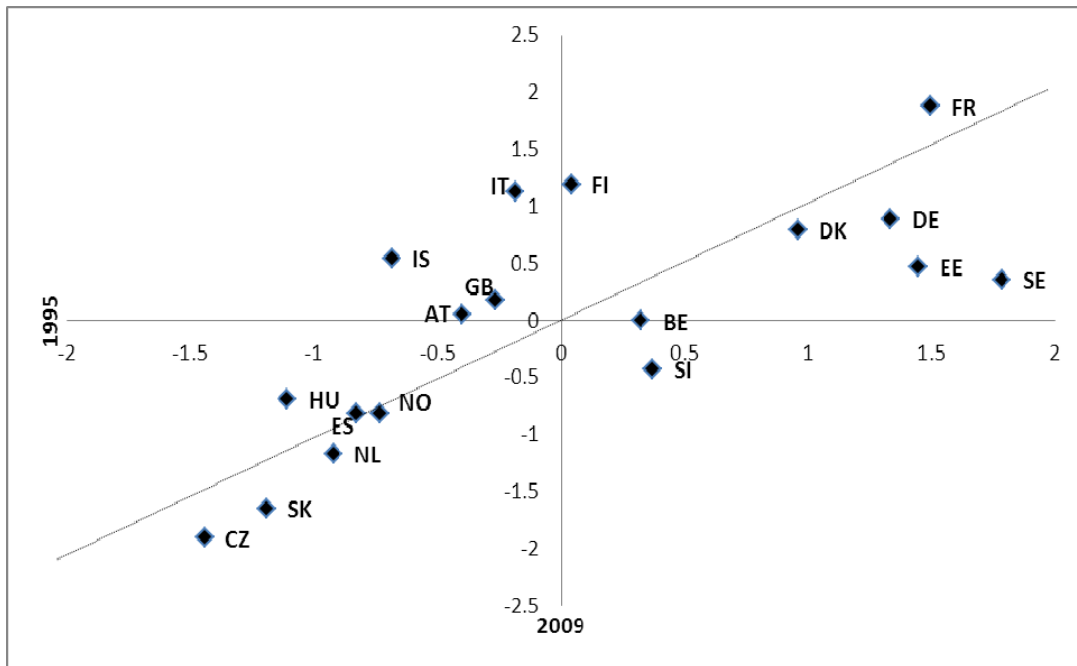


Figure 3.A-B. – Evolution of the sectoral shares on total gross operating surplus and mixed income. Values are standardised with respect to the year mean and standard deviation of the sample considered. *Source:* based on OECD, *STAN Database*.

C. Real estate activities



D. Non-financial services

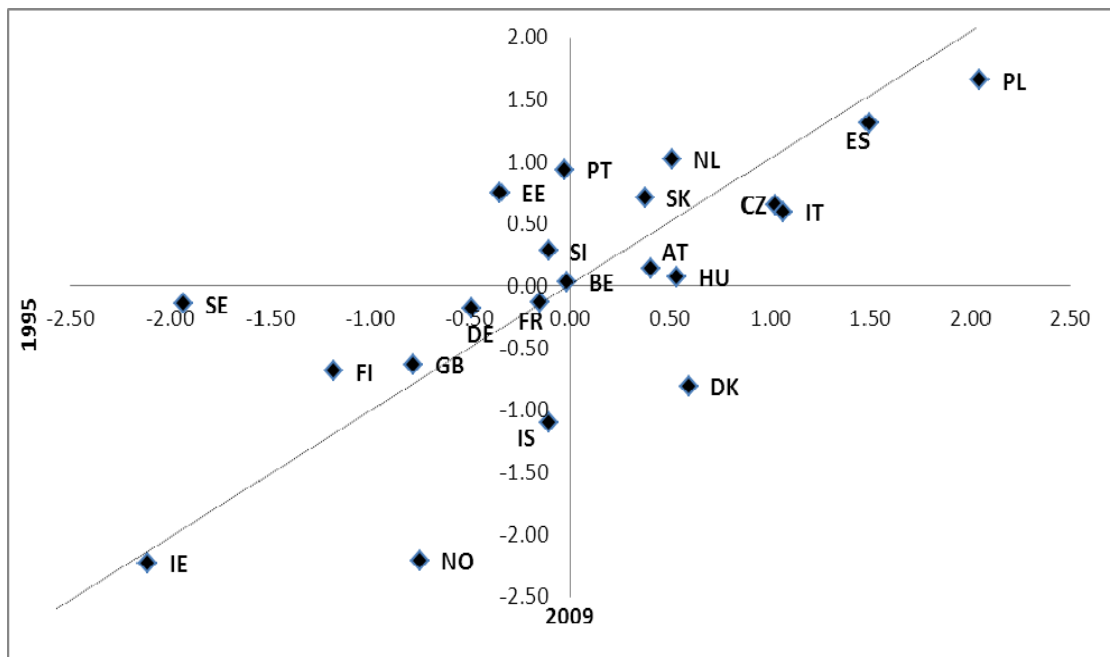


Figure 3.C-D. – Evolution of the sectoral shares on total gross operating surplus and mixed income. Values are standardised with respect to the year mean and standard deviation of the sample considered. (Note: in Figure 3.C. Portugal, Ireland and Poland fall out of the sample).
Source: based on OECD, STAN Database.

E. Other business activities

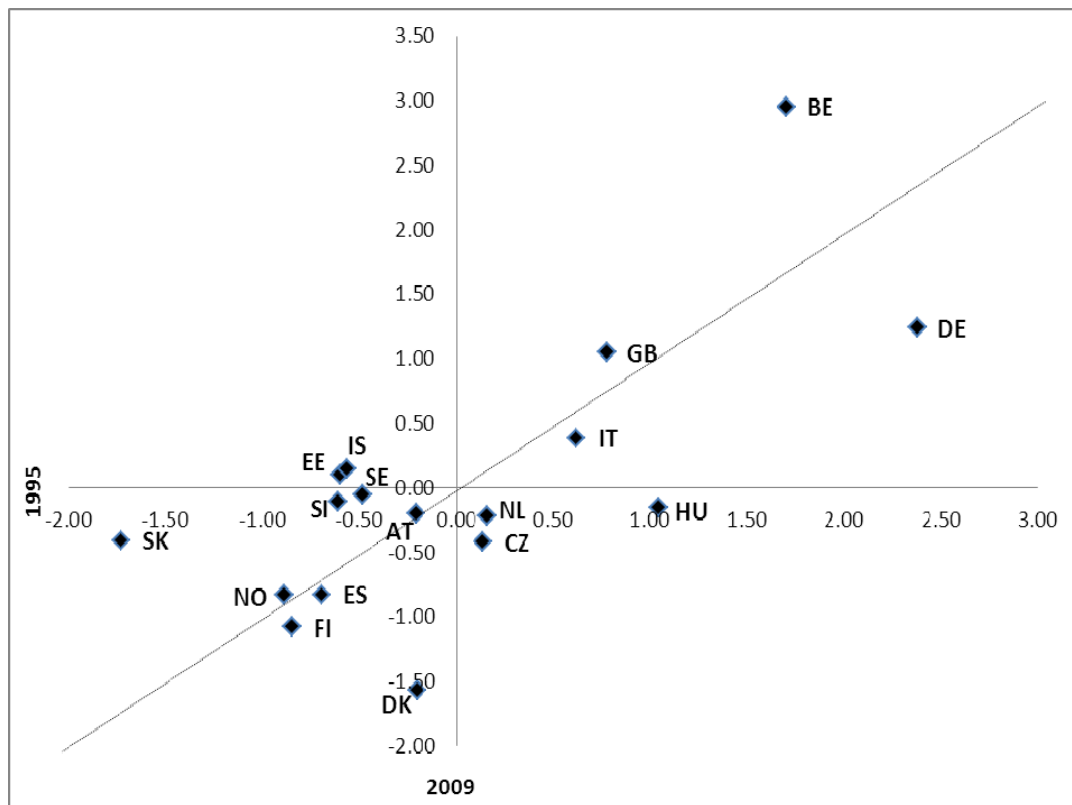


Figure 3.E. – Evolution of the sectoral shares on total gross operating surplus and mixed income. Values are standardised with respect to the year mean and standard deviation of the sample considered. (Note: Portugal, Ireland, Poland and France fall out of the sample). *Source:* based on OECD, *STAN Database*.

1	Austria	AT	10	Germany	DE	19	Poland	PL
2	Belgium	BE	11	Greece	GR	20	Portugal	PT
3	Bulgaria	BG	12	Hungary	HU	21	Romania	RO
4	Croatia	HR	13	Ireland	IE	22	Slovak Republic	SK
5	Czech Republic	CZ	14	Italy	IT	23	Slovenia	SI
6	Denmark	DK	15	Latvia	LV	24	Spain	ES
7	Estonia	EE	16	Lithuania	LT	25	Sweden	SE
8	Finland	FI	17	Netherlands	NL	26	Switzerland	CH
9	France	FR	18	Norway	NO	27	United Kingdom	GB

Table 6 – Country codes according to the international classification ISO 3166-1.