COMPETITIVE ADJUSTMENT AND RECOVERY: THE BRITISH EXPERIENCE FOLLOWING THE DEPRECIATION OF STERLING

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The experience of the United Kingdom following the depreciation of sterling illustrates how an adjustment in the nominal exchange rate can allow price competitiveness to recover rapidly and increase the surplus of the tradable sectors, potentially helping to limit the adverse effects of the recession. However, this process seems to have had a limited impact, since there has been no real improvement in productivity and unit costs to consolidate the competitiveness gains.

Introduction

The competitiveness of an economy is a relative concept that measures the efficiency with which it allocates and uses its resources relative to other economies, with whose products it competes in foreign and domestic markets. An inefficient economy, with low productivity or higher production costs and margins than its competitors, will not be able to preserve its competitiveness and will suffer losses of market share both abroad and domestically, which will eventually affect its growth rate and level of welfare.

The competitiveness of an economy may be affected both by structural factors and by cyclical or temporary ones. From a structural viewpoint, the degree of incorporation of technological innovations into the productive process and the rate of accumulation of capital are fundamental determinants of productivity. Also, it is essential that price and wage formation mechanisms function well. In this regard, the existence of nominal rigidities limits the adjustment of relative prices to macroeconomic shocks and slows down the reallocation of productive factors, leading to losses of competitiveness and a build-up of imbalances.

Over the business cycle, higher inflation in periods of excess demand may lead to competitiveness losses, which will in principle be offset when activity falls below its potential level. However, during periods of recession, technological innovation and the level of human capital skills may suffer, leading to a more lasting deterioration in productive efficiency. The possible adverse effects of recessions will be all the greater the longer and deeper they are, which will in turn depend on the degree of flexibility present in the economy's price formation mechanisms.

Structural policies, intended to remedy deficiencies in physical and human capital and to make price and wage adjustment mechanisms more flexible, are therefore the soundest way of improving competitive capacity. However, structural reforms take time to produce the desired effects. By contrast, depreciation of the exchange rate is a mechanism that can raise competitiveness rapidly. Exchange-rate flexibility is one of the economy's cyclical adjustment mechanisms. Indeed, depreciation of the domestic currency may allow exporters to reduce the prices of their products abroad, and thus to recover market share: it may also enable prices in domestic currency to be raised to some extent, thereby generating funds to undertake job creation, investment or a reduction in the level of indebtedness in a situation of financial stress. In the case of imported products, their sterling prices will increase insofar as importers do not entirely absorb the impact of the depreciation. However, an exchange-rate adjustment will only be an appropriate mechanism to restore competitiveness if the decline has occurred as a result of non-structural factors.

1 This article has had the benefit of excellent technical support from Roberto Pascual.

The experience of the United Kingdom following the financial crisis of 2007-2008 illustrates this point. The depreciation of sterling at the beginning of the crisis entailed an improvement in the profitability of sectors producing tradable goods. This reduced job losses, boosted inflows of foreign direct investment and permitted deleveraging in some industries. However, with the passage of time no real improvement in productivity has been observed to support a lasting recovery in competitiveness.

This article, in the next two sections, reviews and analyses the impact that the sharp depreciation (of around 30%) in the pound sterling had on the price competitiveness of British exports and on margins in the tradable goods sector. It then goes on to examine whether the improvement in the unit margin helped to smooth the adjustment in employment and investment, and to what extent it relieved the financial situation of firms at a time of severe difficulty to access external financing. The final section summarises the main conclusions that may be drawn from this experience of competitiveness adjustment through depreciation.

Impact of the depreciation of sterling on trade flows

At the start of the global financial crisis the pound depreciated sharply. The nominal effective exchange rate fell by almost 30% between 2007 and 2009 (see Chart 1.1). However, the depreciation had little effect on the reallocation of resources towards the production of tradable goods and services. The reduction in the trade deficit in the immediately following quarters was largely due to the fall in imports arising from the impact of the crisis on domestic demand, although the rise in the relative prices of imported products caused by the depreciation also contributed to this process. At the same time, despite its magnitude, the effect of the depreciation on exports was relatively weak.

There are several reasons that may explain the limited impact of the depreciation on exports. First, the importance of exports of financial services in the United Kingdom (around 12% of total exports) should be mentioned. The financial nature of the crisis and the consequent fall in financial activity at the global level severely affected this sector in the United Kingdom, which recovered more slowly and modestly than other tradable sectors. This relative slowness is reflected in the growth differential between exports of goods and services following the depreciation (see Chart 2.1) and helps to explain why services exports performed worse than projected by econometric models, while goods exports were more in line with the behaviour derived from their determinants[2]. As a result, the upward trend displayed by the United Kingdom's share of services trade prior to the crisis came to a halt in 2008 and subsequently went into reverse.[3] On the whole, the growth of British exports was lower than the growth of their markets (see Chart 2.2)

Second, the fact that only a small proportion of British exports are to dynamic markets should be noted. In particular, the EU countries, whose growth was especially hit by the crisis, are among the United Kingdom's main trading partners. Finally, the depreciation of the pound was not fully passed through to export prices, which only declined by 15% between 2007 and 2010 (see Chart 1.2), limiting the improvement in price competitiveness.

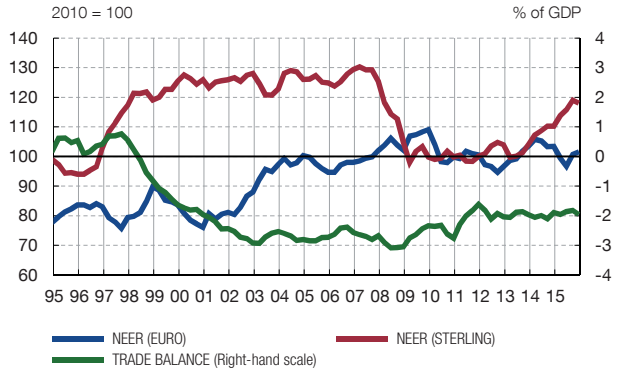
There are a number of reasons why a depreciation may not be fully passed through to export prices. One possibility is that the competitive advantage offered by the depreciation may be used by local producers to increase the price of their products and restore their mark-ups. The mark-ups of British producers had narrowed at the start of the crisis due to the rise in labour costs and the higher prices of imported inputs due to the depreciation

2 See López Vicente (2012).
3 See Kamath and Paul (2011), Chart 5.

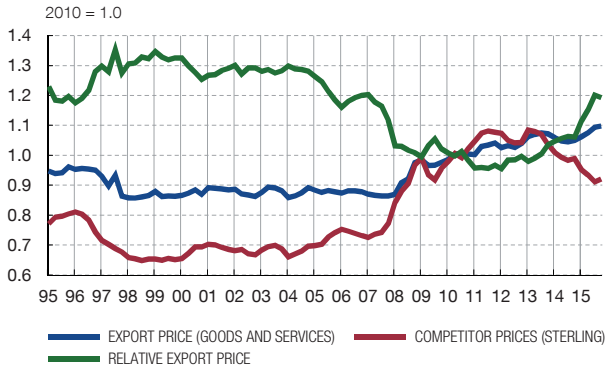
EXCHANGE RATE, TRADE BALANCE AND EXPORT PRICES

CHART 1

1 UK TRADE BALANCE AND NOMINAL EFFECTIVE EXCHANGE RATE



2 EXPORT AND COMPETITOR PRICES. STERLING

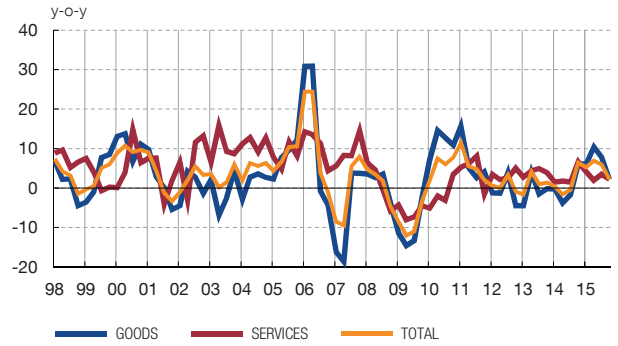


SOURCE: OECD.

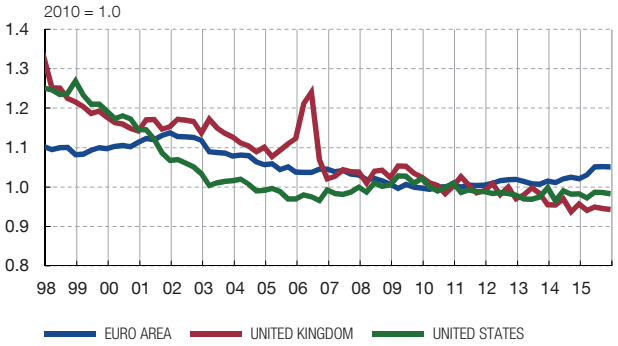
EXPORTS OF GOODS AND SERVICES, AND EXPORT MARKETS

CHART 2

1 EXPORTS OF GOODS AND SERVICES



2 EXPORTS PERFORMANCE VERSUS EXPORT MARKETS (RATIO)



SOURCES: OECD and WTO.

itself. When a significant proportion of exporters follow pricing-to-market strategies, setting different prices according to conditions in the target market, or when they set export prices in foreign currency (foreign currency invoicing), the price in local currency of sales abroad will be the result of the strategy of pricing in foreign currency in each target market and of exchange-rate movements. Had British producers decided to keep the price of their products in foreign currency unchanged, the depreciation of 2008-2009 would have entailed an average increase in the price in pounds of exports of around 30%, with the consequent increase in the unit margin, but their price competitiveness would not have improved. As the sterling prices of sales abroad increased by around 15% between 2007 and 2010 it may be inferred that exporters reduced their prices in foreign markets by less than the depreciation, thereby increasing their mark-ups, or offsetting higher costs.

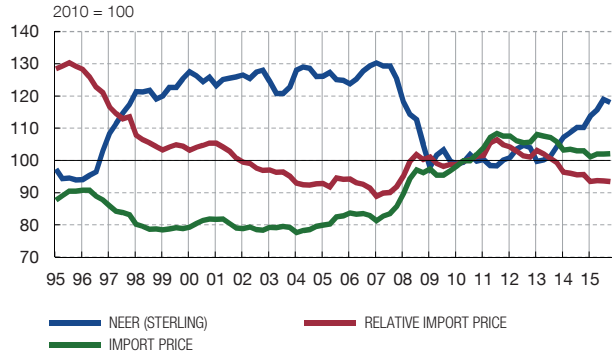
This behaviour was not specific to this crisis. The evidence available shows that around 70% of British exporters set the price of their products in foreign currency,[4] especially in the case of sales to other EU countries, since the euro is a currency with large and liquid markets, so that the cost of hedging is lower than in other cases.[5] The evidence also

4 Goldberg and Tille (2009).
5 See MacCoille et al. (2009).

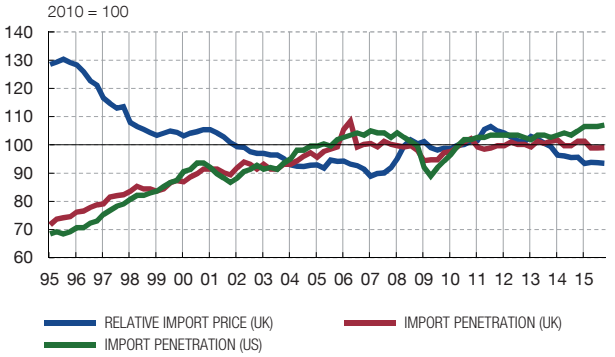
IMPORT PRICES AND PENETRATION

CHART 3

1 UNITED KINDGOM. EFFECTIVE EXCHANGE RATE AND IMPORT PRICES



2 RELATIVE PRICE AND PENETRATION OF IMPORTS



SOURCE: OECD.

indicates that British manufacturers tend to align the prices of their products more with those of their competitors, when expressed in a common currency, than with their own labour costs,[6] in an attempt to conserve market share. In any case, the depreciation of the exchange rate offers goods and services exporters the possibility of choosing between various combinations of improvement of price competitiveness and increase in their mark-ups. Whatever the reason for the increase in export prices, the depreciation of the pound offered exporters of goods and services the opportunity to increase the sterling unit margin and to improve the profitability of the export sector, a possibility that was not available to the producers of non-tradable goods. The change in the relative profitability of the tradable and non-tradable sectors is precisely one of the mechanisms that can bring about a reallocation of resources within the economy.

The depreciation of the pound also led to a rise in the price of imports relative to domestic output. The sterling price of imported products rose by 15% in a year (implying a degree of pass-through of close to 60%, in line with the average estimated by the Bank of England[7] for this period) (see Chart 3.1). Subsequently, the strengthening of domestic demand in 2010 enabled import prices to rise further, almost completing full pass-through of the depreciation.

Overall, import prices increased by 17% relative to the GDP deflator. This helped, to some extent, to check import penetration in the domestic market (see Chart 3.2), which had been rising continuously over the previous decade, as a consequence of the higher degree of global integration of economies and the notable appreciation of the pound in 1996 and 1997. The stabilisation from 2007 of the import content of final demand is nevertheless attributed, above all, to the fall in demand that the crisis entailed. It should be pointed out that the increases in prices were particularly significant in the case of services imports,[8] whose price rose more rapidly than that of goods imports between 2007 and 2011.[9] An example of this is the speed at which exchange rate changes were passed through to the price of tourist travel abroad, which led to a shift of demand towards domestic tourism.

6 See Buisán et al. (2006).
7 See Bank of England (2015).
8 See Kamath and Paul (2011).
9 During the subsequent appreciation of the pound, the price of services imports fell more slowly than that of goods imports.

PRICES, COSTS AND MARGINS BY INDUSTRY TABLE 1

	Cumulative change (2007-2010) (%)			Cumulative change (2010-2013) (%)		
	VA deflator	ULC	Unit margin	VA deflator	ULC	Unit margin
Total economy	**8.1**	**8.4**	**-0.3**	**5.7**	**1.8**	**3.9**
Industry	9.9	7.2	2.7	22.0	12.7	9.3
Manufacturing	9.9	4.2	5.6	17.4	5.2	12.2
Construction	-5.3	7.0	-12.4	13.0	8.8	4.2
Services	9.1	8.5	0.6	2.8	-0.6	3.4
Distribution, transport, hotels and restaurants	13.0	13.3	-0.4	3.2	3.6	-0.3
Information and communication	-2.4	-5.0	2.6	2.8	3.8	-1.0
Financial services and insurance	3.7	1.0	2.7	7.4	-4.4	11.8
Real estate activities	12.4	-6.1	18.5	13.3	10.2	3.1
Professional, technical and administrative activities	7.5	9.8	-2.3	-5.8	-5.0	-0.8
Public administration, education and health care	8.9	9.9	-1.0	-1.8	-2.1	0.4
Artistic, leisure and cultural activities	17.7	28.0	-10.3	6.7	4.9	1.7

SOURCE: Eurostat.

Improvement of margins in the tradable goods sector

The behaviour of trade margins in the productive sectors of the British economy may be approximated by the growth differential between the value added deflator of each sector and its unit labour costs. This differential provides information on the changes in the surplus per unit of output or unit margin.

Despite experiencing stagnation at the beginning of the global crisis, margins rose by 3.5% in the British economy as a whole from 2007 to 2013, because prices grew (14%) by more than unit labour costs (see Table 1). This widening was more marked in the tradable goods sector, particularly at the onset of the crisis. Thus, between 2007 and 2013 the surplus per unit of output in manufacturing sectors and in financial services (which can be considered tradable in the case of the British economy, due to the importance of international transactions in the financial system as a whole) grew by 18% and 14.5%, respectively. Conversely, in the case of sectors whose main market is the domestic one, margins either narrowed slightly, as in the case of distribution, transport and the restaurant industry, or more sharply, as in business services and leisure and cultural activities.

As noted above, the widening of margins was not a consequence of a decline in unit labour costs, but rather of a notable increase in prices, exceeding that of costs. Costs increased, even in the early years of the crisis, in almost all sectors, due to the weak growth of labour productivity (see Chart 4). However, in a context of depreciation of the British currency, firms producing tradable goods and services (manufacturing and financial services)[10] were able to pass through this rise in costs to the prices of their products in pounds, causing real wages to fall in these sectors and cheapening the labour factor.

The fall in real wages was substantially widespread among productive activities, in line with the weak growth of productivity. The low investment rates of the British economy since the start of the century seem to have reduced the capital-labour ratio, in terms of both physical and technological capital. At the same time, as regards human capital, there has been a loss of skills, due to the crisis, and a mismatch between the level of education

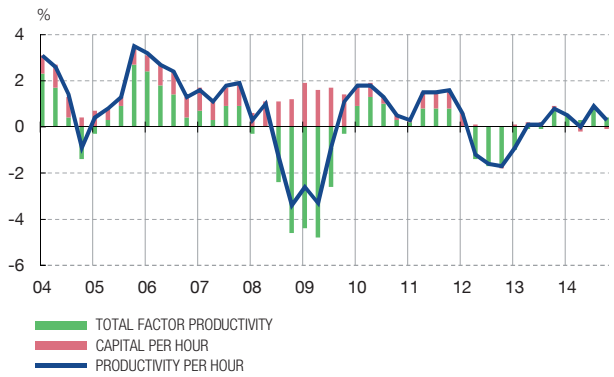
10 Financial services experienced a fall in labour costs from 2010 that led to wider margins.

PRODUCTIVITY AND WAGES

CHART 4

1 REAL WAGES AND PRODUCTIVITY

2 CONTRIBUTION TO GROWTH OF PRODUCTIVITY PER HOUR



SOURCES: Bank of England (Inflation Report, May 2015) and Datastream.

of young people joining the labour market and the demand for skilled labour.[11] All of this has caused a decline in total factor productivity in broad areas of the economy[12] and insufficient capital endowment,[13] with consequences for the growth of labour productivity (see Chart 4.2).

Impact on employment, investment and the financial position of firms

In a context of lower activity, modest recovery of demand and, especially, restricted access to external financing, those firms that were able to generate funds by widening their margin per unit of output found themselves in a better position to temper the impact of the crisis on their investment plans and demand for labour. Therefore, it would seem reasonable to expect employment and investment developments to have been more favourable in export sectors than in other sectors.

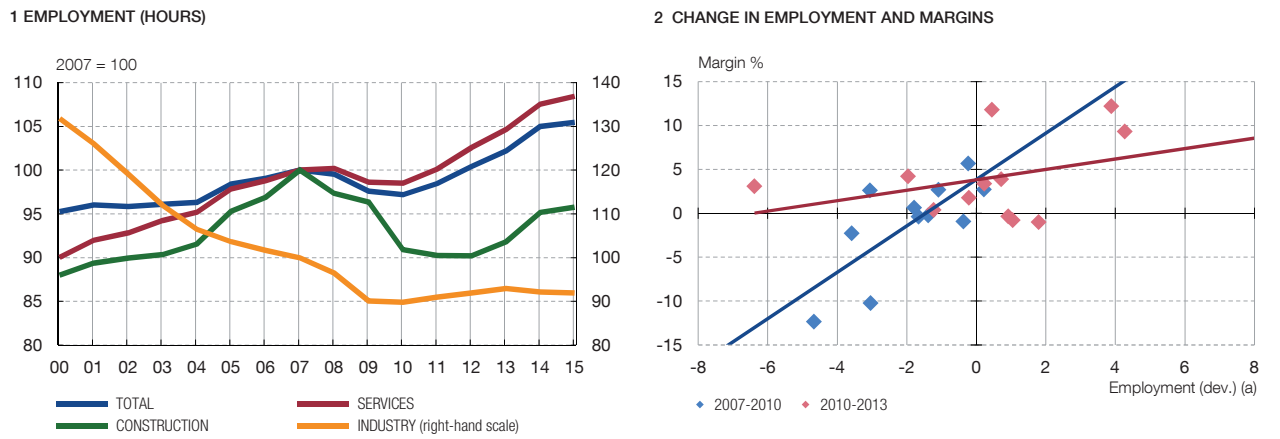
From the start of the crisis, employment in the United Kingdom went through two clearly distinct phases. With few exceptions, employment decreased across the various sectors of activity more or less sharply up to 2010, the adjustment being more marked in terms of hours worked, in line with other advanced economies.[14] Construction and industry were the sectors where a greater relative decrease was recorded (see Chart 5.1). The British labour market embarked on a process of recovery in 2011, with employment increasing by 4.2% in the economy as a whole, driven by job creation in services, while employment in the industrial sector barely increased. Nonetheless, the behaviour of the industrial sector from 2009 was quite favourable when compared with the previous period (2000-2009), which was marked by a structural decline in employment that reduced the number of hours worked by 30%.

If we examine the changes in employment and margins during the crisis in different industries, we see that these variables are almost completely unrelated. However, there is a positive relationship in each industry between the margins and the change in employment, when the latter is measured relative to its path in the period prior to the crisis[15] (see Chart 5.2). Those sectors with the sharpest adjustments in employment between 2007 and 2010, relative to the patterns prevailing in them between 2000 and 2007 (professional and

11 See OECD (2015).
12 See IMF (2016).
13 See Barnett et al. (2014).
14 See Faccini and Hackworth (2010) and Cuadro-Sáez et al. (2012).
15 Measured as the deviation of the annual average change in the periods 2007-2010 and 2010-2013 from the average in the period 2000-2007.

EMPLOYMENT AND MARGINS BY PRODUCTIVE SECTOR

CHART 5



SOURCE: Eurostat.

a Deviation of mean annual change (%) in each period from the average during 2000-2007.

business services and construction), were among those recording the most pronounced falls in margins. Likewise, between 2010 and 2013, those posting the largest relative recoveries in employment (manufacturing industries) were also those which showed the largest improvements in margins since the start of the crisis.

In the case of investment decisions a positive relationship is also detected over the period 2007-2010 between the changes in margins in the various industries and the changes in gross fixed capital formation, relative to the pre-crisis period, although the correlation is lower than in the case of employment. It appears, therefore, that those sectors that recorded an improvement in their margins (in particular, tradable sectors, which benefited from the depreciation) were able to mitigate the adjustment in employment and investment during the recessionary stage of the crisis to a greater extent than non-tradable sectors. During the recovery, this improvement was conducive to a more favourable trend in employment relative to the average level of the pre-crisis period.

In general, the behaviour of employment during the crisis was more favourable than that of investment, the weakness of which has been attributed to various factors (the fall in activity and the sluggish recovery, difficulties in obtaining bank financing, uncertainty and vulnerability due to high indebtedness). These factors must also have had an adverse effect on the demand for labour, but there were other factors that smoothed the fall in employment and boosted its subsequent increase, including the change in the relative price of labour and capital. In manufacturing and financial services, as mentioned above, real wages in terms of producer prices fell notably, as they also did more widely. The change in the relative price of these factors of production, characterised by a larger fall in real wages than in the user cost of capital,[16] helps to explain the more favourable behaviour of employment relative to investment observed in the United Kingdom.

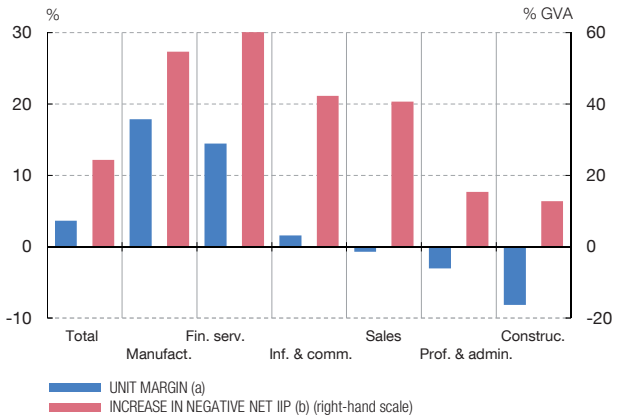
The improvement in margins in manufacturing increased the profitability of the sector and narrowed the differential with the return on foreign investment, which had been favourable to the latter during the pre-crisis period. In conjunction with the fall in the profitability of foreign investment from 2011, very probably due to the euro area crisis, this helped to

16 See Pessoa and Van Reenen (2013) and Banco de España (2016).

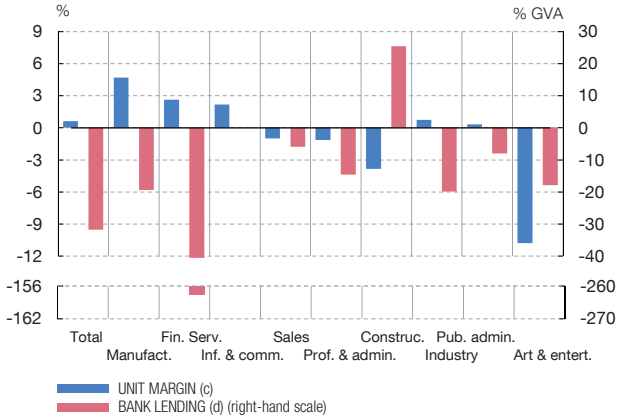
MARGINS, FOREIGN INVESTMENT AND LENDING

CHART 6

1 MARGINS AND FOREIGN DIRECT INVESTMENT



2 MARGINS AND BANK LENDING



SOURCE: Eurostat.

a Cumulative change during the period 2007-2013.
b Percentage of gross value added (2010) in each industry.
c Cumulative change during the period 2008-2011.
d Percentage of gross value added (2008) in each industry.

make investment in British manufacturing more attractive. As a result, a certain shift was observed in the pattern of investment decisions in this industry at the global level in favour of the United Kingdom, as reflected in the net increase in foreign liabilities in the form of direct investment (see Chart 6.1), which contrasts with the accumulation of net foreign assets in the period 2000-2007, when the profitability of investment in the United Kingdom was significantly lower than the return on foreign direct investment. The geographical shift in investment has been somewhat more general, since the direct investment position of the United Kingdom, traditionally in credit, has become a net debit one, since 2011.[17] The increase in the foreign liabilities of the manufacturing and financial services industries, those with the largest increases in margins during the crisis and the subsequent recovery, has been particularly important in this process.[18]

The growth of business investment in the United Kingdom, from 2010, following its decline prior to the start of the crisis, was insufficient to absorb the notable increase in business saving stemming from the increase in margins, so that the net lending of non-financial corporations increased from 2% of GDP in 2007 to 4.4% in 2011. Against a background of growing risk aversion and difficulties in obtaining bank and financial market financing, some of the corporate savings were likely used to reduce firms' high levels of indebtedness.

There is no breakdown for corporate indebtedness by industry, but the data on bank lending, which are available with such a breakdown, indicate that those sectors that recorded the largest increases in margins were also those that reduced their bank borrowing most, at least during the early years of the crisis (See Chart 6.2). That said, it is difficult to infer from this relationship a pattern for the indebtedness of each industry, given the complexity of sources of financing available to firms resident in the United Kingdom: debt securities, financing from abroad through companies belonging to the same group, as well as from foreign banks, for which barely any information is available by industry.

17 Geographical shifts in investment are relevant to explain the behaviour of business investment in certain economies such as the United Kingdom. See Berganza *et al.* (2016).
18 The same conclusion is reached if this analysis is based on cumulative direct investment flows

Since the start of the crisis, all these sources have contributed to the deleveraging that has taken place in the corporate sector, its debt-to-GDP ratio having fallen notably, from 96% in 2008 to 73% in 2014.

Conclusions

The experience of the United Kingdom during the Great Recession shows that the depreciation of the pound led to an immediate, but transitory, recovery in price competitiveness, reflected in an improvement in net exports. The pass-through of the depreciation to foreign-currency export prices was not complete, so that part of the increase in foreign market share was sacrificed in exchange for an increase in profitability in the tradable sectors. The improvement in the profitability of these producers allowed job losses to be softened, higher levels of foreign direct investment attracted and leverage reduced. This was of great importance, since it limited the adverse effects of the crisis on potential growth and helped reduce firms' financial vulnerability. However, no substantial gains in productivity – notably weak since the start of the crisis – were achieved. This has been reflected in rising unit labour costs, despite wage moderation, so that producer prices have increased further in the UK than in its trading partners, leading to a progressive loss of price competitiveness, as the favourable effects of the depreciation have faded. In short, there has been no real improvement in productivity to sustain a permanent gain in competitiveness.

In the United Kingdom, the loss of competitiveness has not arisen so much from a lack of labour market or product market flexibility as from very modest productivity growth (as a result of a low rate of capital accumulation and mismatches in the supply and demand for labour). The deterioration of productive, technological and human capital and the lack of effective policies to address these challenges remain an obstacle to improvements in the efficiency and competitiveness of this economy.

15.6.2016.

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