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COULD EDUCATIONAL REFORMS HAVE SOMETHING TO DO WITH MUNDELL'S TRIANGLE OF IMPOSSIBILITY ?

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Editor's Foreword

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Abstract

In this paper we discuss the role given to education and training by policy-makers in France and Britain between 1980 and 2000 in relation to their chosen socio-economic strategies. We highlight conjunctions between levels of economic openness, exchange rate environments and types of educational policies. The two countries are interesting case studies due to the high degree of time-consistency between the policies implemented by stable governments (albeit of opposite political orientations).

In Britain, a strategy of deregulated labour markets, a scaled-down welfare state, reduced taxation and monetarist rules against inflation was implemented whilst exchange rates floated for most of the period. Educational policy appeared initially to be part of an ideological package but became a prominent concern 'of its own' during periods of semifixed exchange rates (1987-92) and when the value of the pound soared (from 1997 onwards). This indicates that human capital policies as a strategy for increasing the overall competitiveness of a nation may be influenced by the exchange rate environment and the general political economic context. This idea is further strengthened by the case of France, where, after a short-lived attempt between 1981 and 1983 at reflating the economy via Keynesian-informed principles, French policy-makers chose to take the route of European integration with exchange rates fixed at a high level. In a rigid labour market and with public policies positively restricting the possibilities of further deregulation and tax reductions, unemployment levels soared, especially among young people. These elements may explain the increased emphasis placed on education and training for boosting competitiveness from a human capital perspective in the hope that this would foster quality and innovation so as to maintain and improve the country's competitiveness in an increasingly open economy and integrated European Union.

Introduction

Throughout the 1980s and 1990s, France and Britain opted for two different routes in their attempt to stem the economic slow-down brought about by the oil crises of the 1970s. In Britain, after Labour governments had implemented aggregate demand policies to their limit

(CRAFTS, 1998)¹, a Conservative majority came to power in 1979 and remained in office for eighteen years. In France, after more than 23 years of right-wing governments, the Socialist François Mitterrand won the presidential elections in 1981 and, excluding short *cohabitation*² periods, one may say that the country was governed by left wing coalitions until 2002. On both sides of the Channel there was therefore a degree of political stability which allowed the implementation of policies that reflected the ideological leanings of the political leaderships in the way they sought to tackle the social, political and economic problems that the two countries faced. Here, our contention is that causal links do not necessarily only obey functional principles as the economic constraints and rationales which influence public policy choices, including education and training policies, are themselves influenced by political and social contexts. We have sought to understand educational policies in France and England between 1980 and 2000 in these terms, arguing that educational reforms have been used not only as an ideological shop window but also as an area of domestic policy on which to fall back when other political options have stalled or been impossible or unavailable.

Public policy choices and educational policy

We propose an interpretation of educational policy as a macro-economic adjustment variable for political decision-makers inspired by Mundell's triangle of impossibility model (1963). This model shows how choices made in certain public policy areas impact on the range of possible options in others. For example, in a situation of free-moving capital, it is possible for a government to influence exchange rates using monetary policies but fixed exchange rates will be maintained at the expense of autonomy in monetary policy. This was the situation in France when governments defended the fixed parity of the French Franc in relation to the Deutschmark in the 1980s: the *Banque de France* had to raise its interest rates when the *Bundesbank* did so, even if this ran against the short term interests of the French economy. On the other hand, when capital moves freely with monetary policies remaining autonomous, exchange rates cannot be fixed. Britain has been in this type of situation during most of the period being considered. When exchange rates are fixed an autonomous monetary policy is only possible if strict control on the movement of capital is exercised. This is what

¹ From 1964 to 1979, with the exception of 1970-74, the period during which Edward Heath was Prime Minister

² When the elected parliamentary majority and the president belong to opposing political tendencies

the first Socialist government in France tried unsuccessfully to achieve in the early 1980s.

Our thinking also draws on Boltho's suggestions (1996) that, throughout the 1950s and 1960s, the countries with low national currency exchange rates, such as Germany and Italy in the 1950s and France and Spain in the 1960s, were those which gained the most from trade liberalisation in terms of rapid output and investment growth as well as rising export market shares:

"... all four countries also went through significant structural transformations... Improvements in non-price competitiveness were widespread... All this may suggest that, by the time the advantages of low real exchange rates had been eroded (be it by appreciation in Germany or by accelerating wage and price inflation in France, Italy and Spain), these countries found themselves in a stronger position than they would otherwise have achieved. A low real exchange rate, in other words, may have had more than merely transitory effects" (p. 125).

Boltho goes on to suggest that the effectiveness of such policies depended on the specific international context of the pre-1973 period, which was characterised by, among other things, the Bretton Woods nearly fixed exchange rate arrangement, the acceleration of trade liberalisation and the USA's "benign neglect" of its trade balance :

"It would seem plausible therefore to argue that both devaluation and trade liberalisation can provide longer-term favourable effects on economic growth... Most probably, in the circumstances of the time, both effects worked hand in hand, rising external pressures dictated the need for structural change while low real exchange rates provided the funds with which this structural change would be financed" (p. 125).

"Devaluing so as to ensure export-led growth may have been a viable strategy provided it was accompanied by market-opening measures and taken in an environment of quasi-fixed exchange rates. In today's Europe, however, most trade barriers (outside agriculture) have fallen to very low levels, and levels at trade liberalisation, such as those of the 1992 Programme or of the Uruguay Round, are much smaller in scope. Similarly, greater currency flexibility is likely to have diminished the investment response to what are now often seen as merely transitory changes in real exchange rates. In other words, longer-run effects on competitiveness stemming from temporary exchange rate changes (or from radical market opening) may be much less likely at present than they were in the 'Golden Age'' (Boltho, 1996, p. 125-126).

Similarly, it may be argued that, in the last two decades of the twentieth century, the acceleration of trade liberalisation (European Economic Community, General Agreements on Tariffs and Trade ...) in an environment of fixed exchange rates *via* the ERM and then the Euro forced all Western European countries to undergo structural economic reforms in order to remain competitive. In France, all governments have advocated the need to participate in

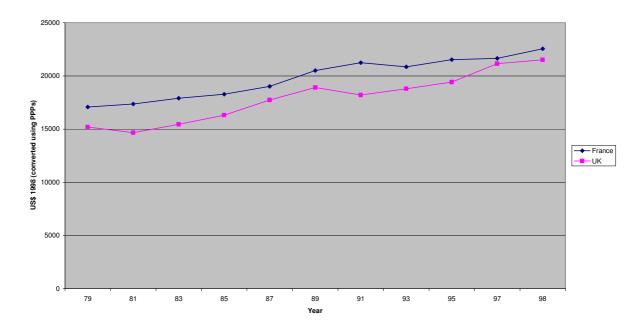
the European Monetary System and in the European Union, which helped them to justify restrictive economic policies (SICSIC & WYPLOSZ, 1996) whilst at the same time depriving them of many of the tools for genuinely autonomous national policies. In this context, the growing emphasis on education and training both at national and European level as a way to increase the stock of human capital (e.g. the Lisbon Declaration) may be seen as a national and European attempt at using education as a macro-economic adjustment variable. There was a similar emphasis in Britain at the end of the 1980s (1987-90) and the beginning of the 1990s with the more or less official shadowing of the Deutschmark followed by brief participation in the ERM until 1992. From the mid-1990s, the surge in the value of the pound in relation to the Euro³ and to the US Dollar had the same effect and may explain why the Blair government has focused its attention on education for economic competitiveness and growth.

Meanwhile the mid-1980s witnessed a renewed emphasis on education and knowledge within the framework of neo-classical economics (endogenous growth literature) (AGHION & HOWITT, 1998, chapter 10). In this revival of growth theory, education was presented as a key to economic growth, either because it increases the stock of human capital (LUCAS, 1988) or because its impact on the level of human capital is reflected on the growth of knowledge, which is itself conducive to economic growth (ROMER, 1990). Some of the most unlikely proponents of this went as far as justifying forms of state interventionism in this area. Lucas, for example, famous for his rejection of the Keynesian macroeconomic management paradigm, showed that because of the externalities that accompany investments in human capital, an accumulation of individual choices (i.e. market mechanisms) would be conducive to a suboptimal level of investment in human capital. Profit-maximising individual decisionmakers could not be trusted to take positive social externalities into sufficient account. Of course, it is difficult to prove that these theories have had any direct influence on policies, but they reflected and fed into a new accepted stance concerning education towards the end of the 1980s. In 1989 the European Round Table of Industrialists first produced a report on the state of education in Europe and the need to reform it (DE MEULEMEESTER & ROCHAT, 2001) and it was also around that time that international comparisons of educational indicators gained ground in national political debates.

 $^{^{3}}$ For a survey on the overvaluation of the pound in relation to the Euro in historical terms, and its undervaluation in relation to the dollar see OECD, 2002, from p.155.

The economic liberal path to competitiveness in the UK: the timing and types of educational reforms

Britain's economic performance in the second half of the 1970s was particularly poor. Between 1973 and 1979, real GDP increased by only 1.5% (2.8% in France) while inflation stood at 15.6% (11% in France) with high rates of unemployment. Strong corporatist trade unions could command wage increases with rates higher than the - rather slow - growth in productivity level (1.6% between 1973 and 1979, 3.2% in France) (MAZIER 1999)

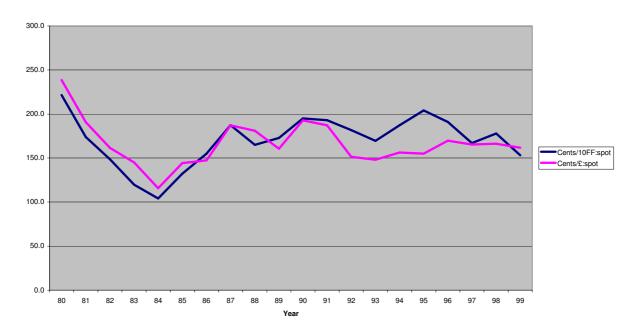


Graph 1: GDP per capita from 1979 to 1998 in France and UK

Source: OECD. Main Economic Statistics OECD Statistics Directorate 1984, 1988, 1992,1996, 2000, 2002

The Keynesian remedy of aggregate demand management policies administered by Labour governments was becoming increasingly inefficient and ineffective (GRANT 2002, CRAFTS 1998). Public opinion started to find the demands of organised unions increasingly unacceptable and unjustifiable (BRITTON 1991). Margaret Thatcher was elected in 1979 on a ticket of supply-side policies inspired by the new Chicago-style monetarist macro-economic schools of F. Hayek and M. Friedman and then by the new classical macro-economics when "the disappointments of monetarism" emerged (GRANT 2002, p. 98).

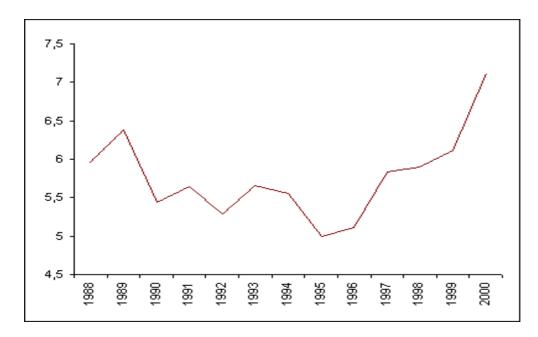
During the first half of the 1980s, the policies of successive Conservative governments were largely inspired by a monetarist free-market agenda which aimed to reduce inflation by controlling and limiting the growth of the money supply, public sector borrowing, public expenditure and taxation (MTFS, or Medium-Term Financial Strategy, see GRANT, 2002, p. 98). This turned out to be difficult to achieve. Money supply proved complex to measure (GRANT, 2002, p. 98). As for taxation, its proportion of national income remained higher than it had been under Labour, shifting from 35.5% in 1979-80 to 37.25% in 1990-91 (LAWSON, 1992) as government strove to reduce an inherited budget deficit. However, redistributive forms of taxation were replaced by so-called neutral taxes such as lump sum taxes or indirect taxation. As unbelievable as it may seem today, the top rates of taxation on earned income and on savings were respectively 83% and 98% at the end of the 1970s. Both rates were reduced to 40 per cent (GRANT, 2002, p. 37). Selective budgetary cuts were implemented for which education was a prime and logical target. A long and bitter fight was waged against organised unions whose power, in the end, was curbed by law. This allowed for further labour market deregulation.



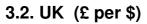
Graph 2: Evolution of Exchange Rates (spot)

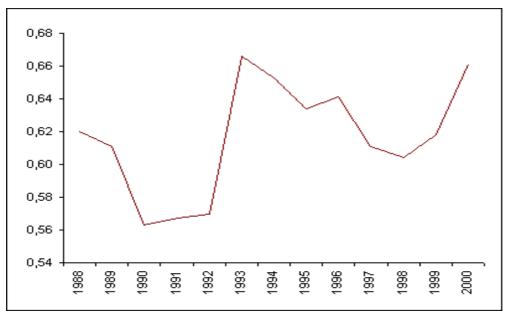
Source: OECD. Main Economic Statistics OECD Statistics Directorate 1984, 1988, 1992,1996, 2000, 2002

Graph 3: Exchange Rates (1988-2000)



3.1 France: (FF per \$)





Source: La documentation française

The aim was to redraw the lines of public expectations by sending a message to employers and union leaders that inflationary wage demands would no longer be met even at the cost of losing jobs (THAIN, 1985, p. 268). However, the money supply approach rapidly revealed its technical and political limits and was soon replaced by an emphasis on Public Sector Borrowing Requirement (PSBR). By the mid-1980s, the money supply target was suspended and the main focus became the exchange rate. From 1987, the Chancellor of the Exchequer Nigel Lawson had an active policy to shadow the Deutschmark (GRANT, 2002, p. 99) but this policy suffered from bad timing as it followed cuts in taxes and interest rates which had led to an economic boom and higher inflation. By 1988, Lawson had to abandon the exchange-rate policy and to raise interest rates (DIMSDALE, 1991, p. 139; GRANT, 2002, p. 100). John Major, who succeeded him in 1989, tried to provide a more stable basis for his economic policy by joining the European Exchange Rate Mechanism (GRANT, 2002, p. 100). This led to increases in interest rates and an increase in the value of the pound in the second half of the 1980s, which further penalised the industrial sector.

The graphs above show that throughout the 1980s the fluctuation of the pound and of the French Franc in relation to the US Dollar followed a very similar pattern. However, there was a significant decoupling of the two currencies at the beginning and throughout most of the 1990s. This is explained by France's decision to join the European Monetary System at an early stage and to remain in it while Britain, having reluctantly tracked the Deutschemark from 1987 before joining the Exchange Rate Mechanism at a later stage in 1990, was forced to leave the system after speculative attacks against the pound in September 1992. The overvalued pound argument which is sometimes put forward in the debate on Britain's international competitiveness during that period is not so strong when one compares how the currencies of the two neighbours fared. Both countries saw the value of their national currency soar in the second half of the 1980s but the value of the French Franc against the US Dollar remained comparably higher than that of the pound throughout most of the 1990s (OECD, 2002).

Throughout the 1980s and 1990s Britain's strategy for remaining internationally competitive was to allow the free operation of domestic markets with policy-makers targeting their action at easing this process. In particular, fiscal transfer in the form of taxation-funded subsidies was no longer an option as the role of the State was not deemed to be to remedy the lack of competitiveness in parts of its national industry. Industrial subsidies - as grant equivalent percentage of GDP - fell from 2.8% in 1979 to 0.1% in 1994 (CRAFTS 1998, p.

12). As the threatened industrial sectors were also trade union strongholds (e.g. manufacturing industry, the mining industry), the difficulties these sectors were bound to face if no longer sheltered from genuine market mechanisms were a not entirely unwelcome form of collateral damage (GRANT 2002). To fight inflation was to fight against distortions in relative prices, which misinformed decisions. Part of this fight was directed against perceived sources of labour market imperfections induced by trade unionism and indexation mechanisms, which meant that price increases translated more often than not into wage increases. Regulations were introduced that reduced the bargaining power of trade unions, the freedom to strike and the obstacles to the flexibility and the mobility of the labour force ('hire and fire') (SELDON & COLLINGS, 2000; CRAFTS 1998).

As public expenditure meant taxes, the remit of State intervention itself had to be limited since it might distort behaviour by penalising productive activities such as labour and investment. The 'overloaded' State withdrew investment from many areas of its traditional responsibility as public deficits were presented as a threat for the economy with higher debt and the crowding out of private investment. The share of public expenditure in GDP was reduced⁴ (FOLEY, 1998, p. 67) with a disengagement from nationalised and publicly-funded industries and a reduction in overall expenditure on public services. This was justified by a reorganisation along the lines of administered markets (LE GRAND, 1991) in the belief that private sector management was more efficient than its public sector counterpart. Like public subsidies, public services were considered to be potentially damaging for the price system in that they did not reflect actual costs and thus led to over-consumption. Privatisations (e.g. utilities, the railway industry) or the setting-up of managed markets in education and the National Health Service were presented as a way to restore market mechanisms (LE GRAND 1991) and therefore real choice for the rational customer. The prevailing liberal economic agenda of the Conservatives was inspired by a 'principle of responsibility' whereby people should face the consequences of their errors or reap the rewards of their efforts. The extension of the welfare state was considered to have corroded this sense of responsibility by weakening incentives to work hard or invest, by limiting the profits gained by the most productive people or organisations and the costs suffered by the least productive ones (e.g. the unemployed, subsidised firms). This led to a predictable surge in income inequalities. The Gini coefficients for the UK increased from 24.8 in 1979 to 33.7 in 1994 (CRAFTS 1998, ATKINSON 2002)

⁴ If for the period 1974-1985, general government expenditure as a percentage of GDP was higher in the UK than in France (43.1 for UK and 39.4 for France), the reverse became true during the period 1986-90 (42.9 for the UK but 52.2 in France) (FOLEY 1998, p. 67, 3.13).

but the assumption was that an increase in social inequalities was the price to pay for economic dynamism and growth, which would eventually result in a bettering of the situation for all (the "trickle-down" effect).

The British economic liberal path to competitiveness from 1979 onwards was one of wide ranging privatisation and deregulation. The financial markets were the prime winners at the expense of productive investments. Investment (as a percentage of GDP) fell from 19.4% in 1979 to 17.3% in 1994 (CRAFTS, 1998). The labour force was left largely unprotected against fluctuations in the job market. This combined with the rolling back of the welfare state to lead to one of the sharpest increases in social inequalities in Western Europe (ATKINSON, 2002). However, this restoration of British competitiveness has been thought largely in quantitative terms (costs and prices) rather than in quality through long-term private and public investment (CRAFTS, 1998, table 1.2, p. 4).

How did education fare in and fit into this overall picture? When the Conservatives came to power in 1979, little was said in their political manifesto about education, although Margaret Thatcher had been Education Secretary at the beginning of the 1970s. Initially, education attracted little interest on the part of the Conservative government apart from the fact that it was an area of public policy where budgetary cuts could be implemented quickly and effectively. Higher education was the first to be targeted and 1981 went down in academic circles as 'the year of the cuts'. Legislation was passed requiring overseas students to pay the full cost of their studies in the UK. This was justified by the high spending per student in UK higher education by international standards and was in line with the avowed desire to 'roll back the frontier of the State' and to decrease public expenditure (DEER 2002).

During the 1980s, the opinion was increasingly voiced that education and particularly vocational training were in need of serious reform in order to foster higher growth and productivity performance (BEAN & CRAFTS, 1996). Research at the National Institute of Economic and Social Research contributed to raising awareness of the issue of insufficient human capital formation in the UK. Given the prevalence of market failure in training activities and the likelihood of suboptimal skills formation in an environment characterised by multiple equilibria (FINEGOLD & SOSKICE, 1988), many economists were of the view that there had to be some degree of political interventionism if these shortcomings were to be remedied. However, only towards the end of the 1980s did Conservative cabinets take a closer look at education in terms of overall provision and structure as opposed to budgetary reforms

or piecemeal initiatives and see it as a potential lever for social and economic purposes. The passing of the 1988 Education Act was as much of a landmark in the history of British education as the 1902 Balfour Act or the 1944 Butler Act. Significantly, the Conservatives turned their attention to the reform and restructuring of education at a time when their ideologically informed monetary experiment started to show its social and therefore political limits and as Britain was attempting to rejoin the ERM by implementing monetary policies designed to shadow the Deutschmark. Educational reforms were presented as a way to achieve three different goals. Firstly the government wanted to show that it was doing something both to correct the growing social inequalities that its broader policy implementation had generated and to foster the meritocracy that would help to secure the smooth running of free markets (including the social market). At the same time, the reforms were clearly conceived, presented and justified as a way to extend the remit and benefits of the free market model into social policy. Finally, they were a way to increase Britain's stock of human capital, an economic indicator on which the country fared poorly in international comparisons (OECD, 2002). With low participation rates in upper-secondary education having become a recognised issue of concern (DEER 2002), "closing the gap" between general academic education and vocational education and at the same time encouraging the provision of human capital compatible with the needs of employers were two clear objectives of the educational reforms. A series of measures and decisions were taken which led to a greater degree of centralisation and homogenisation of vocational training. The traditional divide in British education between a rather liberal education leading to university and a set of vocational studies leading to low skill employment had to be overcome. In 1988, a reduction in the apprenticeship form of training and a greater degree of formalisation and unification of vocational training were decided. National Vocational Qualifications (NVQ) were set up, with the qualifications being considered as capacities rather than competencies. An attempt was also made to subsume vocational training within the broader context of secondary education by the General National Vocational Qualifications (GNVQ), which were seen as prevocational qualifications. These reforms were designed and implemented to encourage participation at upper secondary level while promoting diversity and employability.

More radical reforms such as the voucher system⁵ were not implemented in an upfront manner (SELDON & COLLINGS, 2000). Quality through competition had to be more

⁵ A proposal consisting of parents being issued with vouchers that they could redeem to pay for their children's education. Parents would then 'shop around', considering schools in both the private and public sector, and choose the one they thought to be the best.

politically managed. The 1988 Education Reform Act introduced an unprecedented degree of centralisation in the British educational system. A National Curriculum of ten foundation subjects was defined, with agreed "attainment targets" and assessments at the end of various key stages, at ages 7, 11, 14 and 16. The aim was to bring consistency and comparability to children's learning on a national basis. If the idea of the voucher scheme had been abandoned, its spirit was central to the Education Reform Act whose general purpose was choice for customers through State-managed competition between schools via a reorganisation of funding allocations. Enrolment was deregulated and popular schools were allowed and encouraged to expand their intake through a system of per capita funding (the level of finance that a school received would depend on the number of pupils enrolled). The idea was that such a system would encourage schools to improve their quality in order to attract more pupils and receive more money and, by the same token, that standards would be raised. With the same objective in mind the Inner London Education Authority was denounced as being too left-wing, costly, bureaucratic and ineffective, and was abolished. Its responsibilities were passed to the local boroughs in the hope of saving money by reducing bureaucracy, and better allocating funds for the improvement of standards. The 1988 Act also introduced an opting out alternative, allowing schools to be freed from local authorities and to receive money directly from the central state. The hope was that these grant-maintained schools (GM schools) would be more adaptable and flexible because more decisions would be taken by teachers and parents. Privately sponsored City Technology Colleges were created to teach technical skills. The overall aim was to increase the educational choice available to parents (DEER, 2002).

Higher education was also involved in this stream of reforms. Here, the drive was towards more accountability, competition and efficiency. From 1981 onwards, the overall sums allocated to higher education have persistently decreased in real terms. The tenure system was abolished in order to increase incentives to perform at the highest level. A University Funding Council (UFC) replaced a University Grants Commission (UGC), 'to remove the prohibitive cost of expanding the number of students in higher education' (SELDON & COLLINGS, 2000, p.44). In 1986, the first Research Selectivity Exercise was carried out. At a later stage, this tool was hijacked by central government and, since then, various Research Assessment Exercises have been carried out, with the implicit objective of concentrating research activities in a few 'centres of excellence'. Reforms were also carried out in the non-university sector of higher education where the polytechnics were made independent from local authorities to become self-managed bodies funded by central

government. In 1992, both the public sector of higher education and the universities were placed under a single funding umbrella. The implicit objective was to make the overall higher education system more responsive to market mechanisms by abolishing the prestige differential between academic universities and the more vocational polytechnics and submitting them to the same government-sponsored funding allocation process. Technical and vocationally oriented education was persistently promoted as being more useful for restoring British economic performance.

Following these sweeping changes, the 1990s were characterised by various smallscale educational experiments without any clear-cut consistency (ASHTON & GREEN 1996). With the Pound soaring from 1996 onwards, education soon became a central issue again under the New Labour government, suggesting that there could indeed be a link between fixed exchange rates, lack of policy instruments and educational policy. With New Labour endorsing many policies that had been pioneered by the Conservatives, the role of a good education as a proxy policy for reducing social inequalities became even more prominent in government discourses.

The overall outcome of education and training reforms in the UK are mixed. Numbers seem encouraging (BEAN & CRAFTS, 1996). In 1978-79 only 23.6 per cent of school leavers had five or more A-C grade passes at O level, compared with 41.2 per cent in 1992-93 at GCSE. In 1993, one-third of eighteen-year-olds went into higher education, compared with only 15 per cent in 1988 and 12 per cent in 1981. However, harsh criticisms continue to be levelled at both the quantity and the quality of the education and training of the British labour force (LAYARD & al 1994, EKINSMYTH & BINNER 1994). At present it is unclear what has been achieved in terms of human capital formation.

Social and political interventionism in France and the timing and types of educational reforms

Between 1981 and 1984, the French government tried to implement an interventionist, socialist route characterised by, among other things, an increase in public ownership of companies (nationalisations⁶), high rates of redistributive taxation (e.g. wealth tax), increased

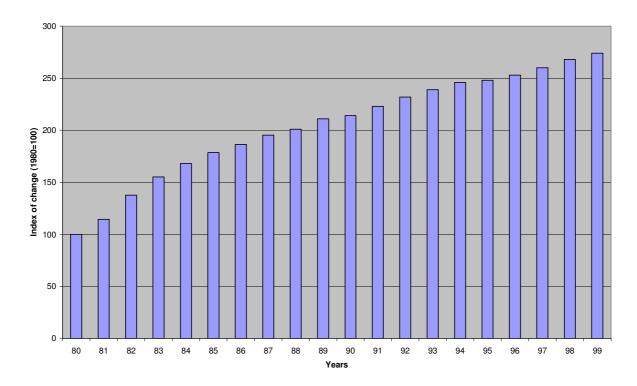
⁶ CGE, St Gobain, Pechiney Thomson and Bull

public spending, exchange controls, a more rigid labour market (e.g. compulsory annual pay bargaining, increases in the minimum wage (see table 1, Graph 4), compulsory administrative authorisation for dismissals, the 39-hour week) (MUET & FONTENEAU, 1990). The economic manifestation and impacts of such a policy can be summarised in Table 2 (BLANCHARD, 2000).

Year	in FF	%	Year	in FF	%
		increase			increase
1980	14.79	-	1991	32.66	2
1981	17.76	20	1992	34.06	4
1982	20.29	14	1993	34.83	2
1983	22.33	10	1994	35.56	2
1984	24.36	9	1995	36.98	4
1985	26.04	7	1996	37.91	3
1986	26.92	3	1997	39.43	4
1987	27.84	3	1998	40.22	2
1988	28.76	3	1999	40.72	1
1989	29.91	4	2000	42.02	3
1990	31.94	7	2001	43.72	4

Table 1: Gross Hourly Minimum Wage in France (1980-2001)

Source: INSEE



Graph 4: Index of change of labour cost in France (engineering industry)

Source: OECD. Main Economic Statistics OECD Statistics Directorate 1984, 1988, 1992, 1996, 2000, 2002

Table 2: Macroeconomic Aggregates, France 1980-83 (from Blanchard,O., 2000, p. 371)

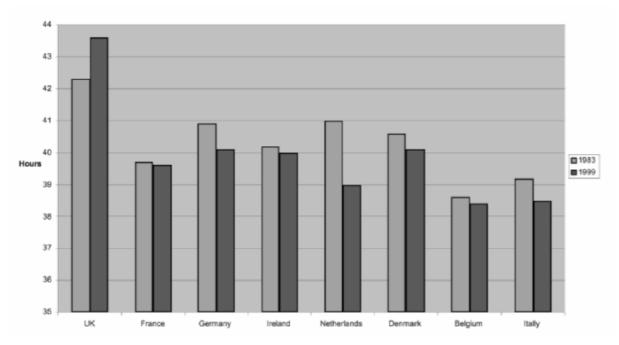
	1980	1981	1982	1983
GDP growth %	1.6	1.2	2.5	0.7
EU growth %	1.4	0.2	0.7	1.6
Budget surplus	0.0	-1.9	-2.8	-3.2
Current account surplus	-0.6	-0.8	-2.2	-0.9

Budget surplus and current account surplus are measured as ratios to GDP, in percentages. A minus sign indicates a deficit. EU growth refers to the average growth rate for the countries of the European Union.

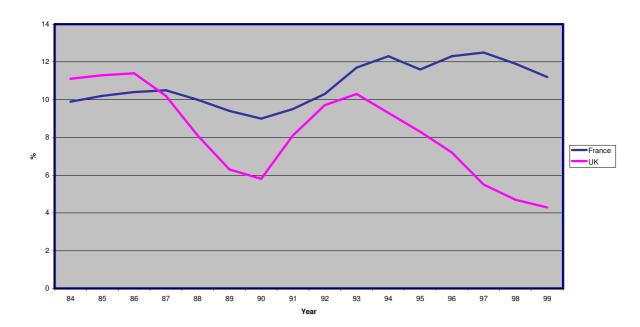
Source: OECD Economic Outlook, December 1993.

This was first implemented in a context of floating (fixed but adjustable) exchange rates in the European Monetary System, then in a context of nearly-fixed exchange rates as French governments towards the mid-eighties - and after several devaluations (PLIHON, 1991, p.92) - reverted to a policy of shadowing the Deutschmark in order to participate in the new European economic and monetary union (1987-1992). This culminated in the launch of the European Currency Unit, the signing of the 1992 Maastricht Treaty, the freezing of exchange rates between European currencies in 1999 and, finally, in the official launch of Euro coins and banknotes in January 2002. At the beginning of the 1980s, foreign exchange rates could still play the role of an adjustment variable, as illustrated by the repeated devaluations of the French Franc. Together with fiscal transfers at an industrial and social level (OECD, 1998a), this dampened the effects on unemployment in a rigid labour market. However, when foreign exchange rates could no longer play the role of an adjustment variable, there was a rapid worsening of unemployment figures.

Graph 5: Weekly working hours: UK, France and other European countries (1983–1999)



Source: Labour Force Survey, Eurostat, ONS 2000.



Graph 6: Unemployment rates France & UK

Source: OECD. Main Economic Statistics OECD Statistics Directorate 1984, 1988, 1992,1996, 2000, 2002

Regarding education, the new left-wing coalition in power in France chose to increase expenditure sharply and then stabilize it in relation to GDP (MEN, 2001, p.261). At first, this increase appeared to be more a political and ideological stance in line with the broader type of ideologically informed policies that were being carried out (e.g. nationalisations, control of the movement of capital) than an economically justified option⁷. Attempts were made to establish the 'unified' national system of education which, as presidential candidate, François Mitterrand had pledged as one of his 1981 electoral manifesto's 110 propositions. The Savary Bill favoured a state-run system at the expense of the private (i.e. Catholic) sector of the primary and secondary education system. A political battle was being fought according to ideological divides inherited from the politics of the Third Republic. However, after a number of massive demonstrations in Paris and throughout the country both in favour of and against the project and with no clear-cut majority, the project was swiftly abandoned (LAUER, 2003). In 1984/85, a combination of a lack of strong ideological leadership, a flagging in the Socialist demand-led economic policy and the growing importance of the European and international dimension in the domestic policy agenda indicated a turning of the tide (LOMBARD, 1995).

⁷ This was also true for the immediate repeal of the Sauvage Law, the 1982 Chevènement Law on Research and the aborted 1984 Savary Law on public and private schools.

From the mid-1980s onwards, the debate on education for employability gained ground in the discourse of the governing elites regardless of their political hue. For the Left in power, unable to prevent the deepening of the economic crisis and its corollary, rising unemployment figures (see Graph 6), this reflected a gradual awakening to the realities of market pressures in an increasingly open national economy. A discourse on education for national productivity and competitiveness developed alongside the egalitarian discourse on education for social equality and individual betterment. Quantitatively the effect was an increase in participation rates at all educational levels (DEER, 2002). Qualitatively, however, the choice of policy was telling as diversity through vocational education became politically favoured as a route to achieve quantitative targets⁸. This not only signalled a departure from the egalitarian beliefs that had informed the pre-1981 political manifesto of the left-wing coalition in education matters but it was a form of yielding to employers' demands which was somewhat antithetical to the notion of class-struggle that had so far underpinned much of the coalition's social and economic policy. In this context, the run-up to the signing of the European Act (18th February, 1986) represented a decisive moment for the central political spheres. It meant that France's still rather sheltered national economy (FOLEY, 1998, p. 56) would soon have to face compulsory price deregulations and European, as well as international, competition (SICSIC & WYPLOSZ 1996, p. 234). Restrictive economic and financial practices, such as the control of exchanges introduced by the Socialist government after its election, would no longer be a feasible option (SICSIC & WYPLOSZ 1996). A majority of unskilled jobs in traditional industries such as shipbuilding, car manufacturing, textile or mining were already on the wane and the trend could be expected to accelerate with new sectors of activities replacing traditional ones. Sicsic and Wyplosz (1996) stressed that:

"the new policies developed after the exchange crises of 1981-83 relied on three pillars. First, an explicit move against wage indexation was deemed necessary to bring inflation down. Second, exchange rates would not be used to correct past policy mistakes. Instead macroeconomic policies would be steered towards the attainment of stability in prices, exchange rates and budget balance. Third, industrial policy would be reconsidered, with much less sympathetic eyes. All three approaches represented a major innovation because they were proposed by a leftist majority whose history had been dominated by radical talking" (SICSIC & WYPLOSZ 1996, pp. 226-227).

⁸ Savary's scientific and technical university diplomas (DEUST), Chevènement's vocational baccalaureate and university Masters, Allègre's *Instituts Universitaires Professionalisés* (IUP)

In the future competitive environment that the terms of the European Act were redrawing, the quality of the workforce was presented by the polity as a key factor which would give the country a decisive competitive edge on the international stage (DEER 2002). If the French Republic was to produce the kind of manpower a 'post-industrial' economy required there could be no hesitation: education, including higher education, had to become a national priority. 'Education, education, education' could have been the motto of the Fabius government (1984-86). For a government which had more or less openly decided to adjourn its strict Keynesian experiment, such a political posture presented other more immediate advantages. The unemployment rate the new government had pledged to curb was still very high, especially among young people. Moreover, as more radical socialist inspired measures seemed more or less implausible now, the emphasis on education was an important source of political legitimacy for the Left in power as it pleased its traditional core voters, many of whom worked in the national education sector.

In 1985, influenced by experts who forecast a future need for manpower educated to at least upper-secondary level (MISSION EDUCATION-FORMATION 1985), Jean-Pierre Chevènement, the new Secretary of State for National Education, set two stringent targets for the national education system: firstly, every school leaver would be provided with recognised professional qualifications by the year 2000 and, secondly, 80% of a class-age would reach *baccalauréat* level. Significantly, and in spite of bitter comments denouncing the policy of expansion as demagogical and ill-conceived, these objectives have been endorsed by Chevènement's successors, regardless of their political affiliation. In 1989, Lionel Jospin even transformed them into a legal national requirement (JOURNAL OFFICIEL 1989, art.20). For Chevènement this was not to be equated with a target of 80% of an age cohort *passing* the baccalaureate, nor was it to be interpreted as aiming to produce more young people with similar academic qualifications (DEER 2002).

A new type of *vocational baccalaureate* was created in order to attract more students to the vocational sector of secondary education. This was not unlike the later attempt in Britain to promote General National Vocational Qualifications (GNVQs) and, as in Britain, the public response to this new type of qualification was mitigated (LEFRESNE 1998; CEDEFOP 2001). The vocational tracks contributed to the overall attainment of the politically-set quantitative target but, with many parents eager to prepare their offspring for the best possible opportunity to participate in higher education, much of the growth also took place in the more traditional academically-oriented streams of upper secondary education (PROST 1992; ESQUIEU & POULET-COULIBANDO 2002). This unintended consequence

was partially due to a failure at this stage in the quest for a unified national system of education to address the internal logic of the French educational system and, in particular, the Malthusian and reproductive recruitment practice of its elite (MERLE 1996, BOURDIEU 1989). This may be compared with the situation in Britain (albeit very cautiously) (DEER 2003), where any attempt at reforming and diversifying secondary schooling with the job market in mind is distorted by the impact of the independent school/elite universities sector. The logic of 'quest for social status' led a large proportion of a class age to opt for the general, rather than vocational, track and then for general orientations in the university sector, which had, at the time, little incentive to modify what it traditionally supplied. In 1995, dropout rates in university-level education in France stood at 45% (18% in the United Kingdom) (OECD, 1998b, p.198).

The extent to which this structure of incentives persisted throughout the 1980s and organised the whole educational system around a normatively selected elite, was superimposed on the reinforced rigidity of the job market that played against newcomers and on the gradual impossibility for French governments to use interest rates to boost a slow-growth economy. This led to a significant waste of financial and human resources, notably in terms of high rates of youth unemployment. In 1989, the unemployment rate stood at 22.6% for those under 25 years of age when the overall unemployment rate was 9.6%. In this sense, the expansion of free higher education in France may be interpreted as a form of intergenerational fiscal transfer. However, given the dearth of maintenance grants, this has worked in favour of middle-class participation (CHAUVEL 1998). It also suggests insufficient investment in human capital, or more precisely, a misallocation of resources which could account for part of the slowdown in productivity growth from 3.6% in 1958-73 to 2.1% in 1973-92 (Sicsic and Wyplosz, 1996). Since the French education system had not been able to provide large segments of its population with the required skills needed by the economy, there was room for improvement.

In 1986, the first period of *cohabitation* began with a Socialist president and a rightwing parliament and government. The new majority intended to tip the balance back to and beyond the point where it had left it five years before, all the more as some of its leading members were influenced by the British experiment. In an attempt to emulate the type of policies that were being implemented across the Channel, they set out on an ambitious programme of privatisation, deregulation and restriction of social freedoms. This general approach was planned to have ramifications in the educational sector and came to be epitomised by the Devaquet Bill for higher education (DEVAQUET 1987) which planned to make universities far more autonomous in terms of their institutional management (including university fees) (MUSSELIN & FRIEDBERG, 1993). Like the Savary Bill, the Devaquet Bill was an attempt at harnessing education to a broader ideological agenda. As such, it was met with intense opposition that led to street violence during which a student was beaten to death by the police. The Higher Education Minister resigned and the project was instantly withdrawn.

Failure to bring about a radical re-structuring of all or even part of the educational sector (the 1984 Savary Bill and the 1986 Devaquet Bill) dampened the subsequent reforming zeal of governments regardless of their political allegiance at a time when educational output and practice were directly and/or indirectly subjected to new external constraints such as the limits on public expenditure, budget deficit and state subsidies imposed by the Maastricht Treaty criteria, increased international competition with the signing of General Agreement on Tariffs and Trade (GATT) /World Trade Organisation (WTO) agreements, the single European market and even the fixed European exchange rate mechanism. At the same time, there were domestic constraints, such as strong indications throughout the 1980s and 1990s that voters favoured investment in public services, strong labour market legislation and, in general, an interventionist and protective State. Rather than try to implement sweeping reforms by law, policy-makers tended increasingly to try to weaken the autonomous logic of the educational system by applying piecemeal stimuli through central government regulations and broad consultation but, more importantly, with a dose of decentralisation and contractualisation between central government and local/regional elected public authorities (DEER 2002, FRIEDBERG & MUSSELIN 1993 see also POUPEAU 2003).

When a left wing coalition was returned to power between 1988 and 1992, it increased the education budget sharply (MEN 2001, p.261) as it was setting out on a more economic liberal agenda (e.g. budget tightening, privatisations) pointing at new international and European constraints to protect itself from accusations of carrying out half-hearted left-wing policies. In terms of national competitiveness, France could no longer have an independent monetary policy as capital moved freely after 1988 and exchange parity was fixed. Politically, it was difficult for a left-wing coalition to boost competitiveness by deregulating the job market or by drastically diminishing corporate taxation and/or public expenditure. Education was part of the public sector where a left-wing government could at least be seen to be implementing policies which were both socially and politically acceptable (given its mandate)

whist trying to make them sound for national economic performance. Moreover, domestic policies of decentralisation and contractualisation allowed the central government to spread the financial burden and collective responsibilities for the success of reforms (DEER, 2002).

The Right returned to government again in 1993 and remained until 1997, first for another period of *cohabitation* and then under the presidency of Jacques Chirac. Rates of youth unemployment remained high. Rather than try to implement sweeping structural reforms of the educational system, efforts were made to tackle the problem from the other end, namely by proposing partly to deregulate employment regulations for certain newcomers to the job market, namely the Institut Universitaire de Technologie (IUT) students. The assumption behind this reform proposal was that short vocational qualifications were worth less on the job market than 'long-cycle' university studies. This ran against the message all governments had tried to convey more or less successfully since the expansion of postcompulsory schooling. The proposal met with fierce opposition from IUT staff and students. The government rapidly drew back, refocusing its energy on privatisation and the partial deregulation of the job market whilst trying to secure people's votes via fiscal transfer through the worsening of the budget deficit (INSEE 2002, p.123). This was followed by a new period of *cohabitation* from 1997 to 2002, with the new governing left wing coalition implementing and entrenching the sort of approach previously described: increased investment in education, vocationalisation, contractualisation and decentralisation.

By 2000, productivity in France was high enough for the 35 hour-week legislation to be implemented (graph 5 and 6). In terms of GDP per man hour, the comparative level of French productivity compared with the USA (equated to 100) was 76 in 1973 and 102 in 1992 (Maddison, 1995). The same figures for the UK were 68 in 1973 and only 82 in 1992; for Germany they were 71 and 95 (FOLEY, 1998, p. 54, Table 3.3) (see also Graph 1 and graph 5). This was due to a combination of factors. A prolonged period of politically-driven high labour costs forced industry (sometimes with State subsidies) to invest in means of production in order to remain competitive. Here we must stress the competitive pressure linked with the making of the European Single Market. Sicsic and Wyplosz (1996, p. 234) noted that "this development resulted in increased competition... and therefore, made innovations more advantageous, prompting French firms to become more innovative". The fact that these investments were matched by human capital investment⁹ may explain this jump in

⁹ For example, MANACORDA& PETRONGOLO (1999) noted that over the last two decades, though one could observe a "clear sign of a net relative demand shift towards skilled labour market", the skill mismatch (the fact that this evolution in the relative demand for skills would not be matched by an equal increase in relative

productivity. However, the persistence of high unemployment rates indicates that partial deregulation of the job market would now ease the pressure of unemployment. We would argue, however, that in terms of restructuring the major part of the effort has been made. It is easier to loosen up an already tight job market – and in this matter the 35 hour-week legislation has been praised for doing exactly this – than to achieve a long lasting jump in productivity level.

The central argument in this section is that education became a political economic priority (as opposed to an ideological one) for Socialist governments in France when the Keynesian reflation experiment failed to stimulate growth and when it was decided that the country would be part of the Euro zone. The combination of a high taxation/high public spending domestic agenda and of the European and international agenda left the country with few options in terms of sustained competitiveness other than a good overall national public and private infrastructure and an educated workforce to go with it.

European integration, domestic agendas and educational priorities

Throughout the 1980s and 1990s, French governments have been actively involved in the process of European unification, whereas their British counterparts have more often opted for less stringent obligations in this matter. As a result it may be said that since the mid-1980s France, like Germany, has carried out her domestic policies with an eye on the European Union – and in particular on the Euro Zone – of which she has pledged to be a part¹⁰. The setting up of the common European market together with the acceptance of its disciplinary effects on foreign exchange policies imposed by fixed exchange rates and a common currency meant that the relative strengths and weaknesses of the country had to be reassessed at a time when other possible sources of national competitiveness were, in political terms, either unacceptable or impossible. With governments that favoured a regulated and protected labour market together with reaffirmed trade union power (especially in the public sector), the costs of labour could not be allowed to drop too low *via* decreasing salary levels and socially regressive employment policies. The competitiveness of French commerce and industry had

supply) has not been a homogenous phenomenon and was more serious in the UK (and the USA) than in continental Europe, including France.

¹⁰ The written Constitution was modified to allow for ratified international agreements to take precedence over the Constitution itself.

to be achieved essentially through greater productivity and/or quality, that is to say through investment in the modernisation of the means of production and the reorganisation of working practice. The State was active in promoting this modernisation through public investment and R&D expenditure. New physical capital also implied more highly-skilled manpower. With received wisdom linking workforce productivity and product quality to the human capital accumulated by the workforce, education became a clear priority. As Jean-Pierre Chevènement pointed out on the eve of the 1986 Single Act, if the country wished to remain competitive in an invigorated EEC, it had to invest massively in education. Besides the need to overcome high labour costs, there was another important related variable, namely high unemployment rates, especially among young people. Unemployment may be tackled in two non-mutually exclusive ways: it can be reduced or it can be accommodated. Education and training can be seen to allow for both by hopefully equipping young people with the skills they would need on the job market or at least by keeping them in some sort of activity. As Alain Touraine, a leading French sociologist is reported to have replied to President Mitterrand when the latter complained about the cost of higher education at the beginning of the 1990s: "Sir, this is the price you have had to pay to avoid another May 1968!" (quoted in ALLEGRE, 1993, p.149).

Even when it chose to join the ERM and then the Euro zone (which meant completely fixed exchange rates) and when the free movement of capital within the European Community took effect in 1990, France still kept a relatively rigid labour market structure, that is to say a dual labour market with a primary and a secondary market. This has been particularly true in the public sector, less so in the private sector. As France did not make its labour markets significantly more fluid and Europe did not make huge fiscal transfers, unemployment rates have remained high in France but the productivity of those in employment has improved to the point where the last left-wing coalition in power felt it could introduce further labour market legislation to reduce the working week in the hope of creating new jobs. In the case of France, the European political and economic agenda (i.e. the building of the single market, the free movement of capital, the loss of autonomy in monetary policy, the Maastricht criteria, the limitation of fiscal transfer) has combined with the left-wing socio-political agenda to generate high rates of unemployment, in particular in the younger generations (CHAUVEL, 1998). This has also forced the left-wing coalitions to think of education not only as a socio-cultural tool but also as an economic one.

Governments in the United Kingdom have been less openly involved in the European

unification process. Since joining the European Economic Community in 1972, the UK has reluctantly taken part in the building of a more politically and monetarily integrated European Union. The fight against inflation at the beginning of the 1980s was part of a strong domestic agenda. From 1987 onwards, the pound tracked the Deutschemark and Britain joined the ERM in 1990. At the beginning of the 1990s, the reunification process in Germany was accompanied by pressures on German interest rates and by speculation which resulted in the extension of the fluctuation bands inside the ERM. In 1992, following speculative attacks against the pound on the eve of the French referendum on the Maastricht Treaty, the United Kingdom was forced to let her currency float and eventually opt out of the European Monetary Union. Except for 1987-1992, the UK has therefore had a free floating currency. In spite of the damaging effects this has had on the British economy in the short term with a sharp rise in interest rates, in the medium term the devaluation of the pound has also been a source of renewed international competitiveness for British products (especially for a short period after 1992) compared to other European countries in the ERM. This variable was also adjusted at a time when Britain could hardly deregulate its job market any further to improve her competitiveness. Arguably this provided British industry with less of an incentive to peg its competitiveness on structural and sustainable measures such as the modernisation of equipment or investment in skills. This, combined with a deregulated labour market, led to comparatively low rates of unemployment but also, with no set minimum wage level, to an increase in the number of "working poor".

The various European and domestic constraints that have influenced the French economy have not been a strong feature of the UK situation, where the choice of a low-skill route has been an easier, almost natural path to competitiveness matched by the relatively low rate of productive investment and ageing equipment (see table below)

Table 3 : Rates of investment as a percentage of GDP

	UK	France
1980-1989	17.5	20.6
1990-1998	16	18.8

Source : OCDE (1998), Perspectives économiques

Using the same argument as the one put forward for France, that is to say the complementary nature of human and physical capital, we can understand the lack of incentives to invest in education and skills. With polarisation in the job market and in broader society, it is the quality and availability of middle management skills which has been at stake (SICSIC & WYPLOSZ, 1996). There has been a strikingly low level of investment at all educational levels, but in particular at secondary school level, and participation rates after 16 have remained unsatisfactory (MICKLEWRIGHT, 1989) in spite of government initiatives as companies have been trapped in the low skills-low wage equilibrium (FINEGOLD & SOSKICE, 1988). A hint that this might have been otherwise is to be found in the period 1987-1992, when, in a new context of a fixed exchange rate mechanism, the British Government had to reconsider its options, stressing education as a new focus of government reforms and intervention. In a sense this came too late given the type of economic policy that had been implemented at an earlier stage. Finally, in view of what happened in France in contrast to Britain throughout the 1980s and 1990s, we may ask whether the current policies of higher taxes, social protection and the – albeit still remote - possibility of joining the Euro may well explain why 'education, education, education ' has been used as one of the centrepiece of New Labour's social policies. We should also pay attention to the sharp increase in the value of the pound. Following the OECD (2002, p. 25), "competitiveness (as measured by relative unit labour costs) and export performance (as captured by a market share indicator) have considerably worsened since the mid-1990s, primarily because of sterling's sharp appreciation in effective terms, which saw it rise to levels not seen since the early 1980s".

Conclusion

Mundell (1961) has shown that when exchange rates are abandoned as adjustment variables, other adjustment variables need to be found, either on the labour market (mobility in order to avoid unemployment in regions with low productivity), or through fiscal transfers.

In the case of France, the realization of a large common market and the acceptance of its disciplinary effects *inter alia* on foreign exchange policies implied taking into account the country's relative strengths and weaknesses in this new market. With a relatively rigid and inflexible labour market and strong trade unions (especially in the public sector), it has experienced relatively high labour costs. Competitiveness could therefore only be achieved

by favouring the quality of products and processes. If one admits that there is a link between quality of products and the human capital held by the workers (producers) (AIGINGER, 2000), education becomes a clear priority as was pointed out in the mid-1980s. In order to remain competitive in the new European common market, reinvigorated by the Single Act of 1986, France had to invest in education. Highly ambitious quantitative targets were set in order to improve the competencies of the labour force (e.g. the 80% target concerning the bachelor degrees). Besides labour costs, another important and perhaps related variable is the high unemployment rate, especially among young people. France could either try to reduce this unemployment rate or to accommodate it through education and training (aiming hopefully at equipping youngsters with the skills needed on the market, or at least keeping them in some sort of activity).

As France did not make its labour markets significantly more flexible (even if this could be qualified regarding the private sector), and Europe did not make huge fiscal transfers, unemployment rates have remained high. France therefore opted for the education sector as a priority in relation to its European agenda (see the building of the single market and the choice for abandoning the sovereignty on its exchange rates) and the implied consequences of its other choices, for example the high unemployment rates among younger people. One must also mention the role of the State, which has promoted the modernisation of France through public investment and R&D expenditure (FOLEY, 1998, SICSIC & WYPLOSZ, 1996). Modernisation, new physical capital also implied a more skilled manpower as human and physical capital are to some extent complementary.

By not belonging to the Euro zone, the United Kingdom has been less directly involved in the core of the European unification process. The country became part of the EU in 1972 and since then has hardly been proactive in the unifying process of European integration. For a time, from 1987 to 1990, it tried to track the Deutschemark (even if mainly for internal reasons, looking for an anchor in its anti-inflation policy (KITSON & MICHIE, 2000, p. 107), before trying to join the EMS (from 1990 to 1992). This led to a soaring pound, which penalised the manufacturing sector. In 1992, the pound was left to float as the UK opted out of the European Monetary Union. Therefore, except for 1987-1992, the UK had a free floating currency. With this adjustment variable in hand, it may be argued that the need to maintain competitiveness via more structural measures (investment in skills, modernisation of equipments...) was felt less urgently, all the more as the Conservative government's lack of a coherent industrial policy led to many closures in sectors that were

deemed non-competitive. Another choice could have been to try to adapt them to new requirements through temporary subsidies. The choice of a deregulated labour market (after the fight against trade union power between 1979 and 1988) contributed to lower the level of youth unemployment. The various variables present in France, such as European constraints, competitiveness, high labour costs and high youth unemployment, were less present in the UK. The choice of a low skill route was therefore made easier. Historically, this was not new (SANDERSON, 1999). Add to this the relatively low rate of productive investment in the UK and ageing equipment, then with the argument of human and physical capital being complementary, one can understand the low incentives in investing in education and the low post-16 participation rates (MICKLEWRIGHT 1989). A radical change in this overall picture has been the policies implemented during the period 1987-1992, where the constraints of the fixed exchange rate mechanism may have obliged the British government to think in terms of other strategies. In 1988 the much-quoted article by Finegold and Soskice on "high skill-high wages route" was published in Oxford Review of Economic Policy. The same year, a wide ranging and historic Education Act was passed which stressed education as a new focus of government intervention.

Briefly stated, in a context of internationalisation and high competitive pressure, and with no recourse to the exchange rate to defend the competitive posture of national firms, with high labour costs and limited room for manoeuvre in terms of fiscal and monetary policy (correlated with the disciplinary effects of the fixed exchange-rate mechanism), education and training appear to be key economic instruments for facing the requirements of producing high quality products through innovative processes. The commitment of continental European countries to the building of a fixed exchange rate area and a real common market led them to consider education as something which could not be benignly neglected, as the UK has perhaps tended to do for too long. The participation of the UK in the Euro zone might be a good device for pushing the country towards the direction of a high-skill route.

BIBLIOGRAPHY

AGHION, P., P. HOWITT, C. GARCÍA-PEÑALOSA, M. BRANT-COLLETT, M. (1998), **Endogenous growth theory** (Cambridge, Mass., London : MIT Press).

AIGINGER, K. (2000) Europe's position in Quality Competition: Background Report for the "European Competitiveness Report 2000 (Luxemburg, DG Enterprise-Enterprise Policy).

ALFORD, B.W.E. (1993) **British Economic Performance** (Cambridge, Cambridge University Press (New Studies in Economic and Social History).

ALLEGRE, C. (1993) L'âge des savoirs : pour une renaissance de l'université (Paris, Gallimard).

ASHTON, D. & F. GREEN (1996) Education, Training and the Global Economy. Cheltenham: Edward Elgar.

ATKINSON, T. (2002) Top Incomes in the United Kingdom over the 20th century, **Oxford Economic and Social History Working Paper**, WP 2002-W43. January.

BEAN, C. & N. CRAFTS (1996) British economic growth since 1945: relative economic decline... and renaissance?, in: CRAFTS, N. & G. TONIOLO (ed.) Economic Growth in Europe since 1945 (Cambridge, Cambridge University Press).

BLANCHARD, O. (2000) Macroeconomics (Upper Saddle River (NJ), Prentice Hall International).

BOLTHO, A. (1996) Convergence, competitiveness and the exchange rate, in: CRAFTS, N.
& G. TONIOLO (ed.) Economic Growth in Europe since 1945 (Cambridge, Cambridge University Press).

BOURDIEU, P. (1989) La noblesse d'Etat : grandes écoles et esprit de corps (Paris,

Editions de Minuit).

BRITTON, A.J.C. (1991) Macroeconomic Policy in Britain 1974-1987 (Cambridge, Cambridge University Press).

BENASSY-QUERE, A. & B. Coeuré (2002) Economie de l'euro (Paris, La Découverte).

CEDEFOP/EURYDICE (2001), Initiatives nationales en faveur de l'éducation et de la formation tout au long de la vie en Europe (Brussels, CEDEFOP/Eurydice).

CHAUVEL, L. (1998) La seconde explosion scolaire : diffusion des diplômes, structure sociale et valeur des titres, **Revue de l'OFCE**, 66, pp.5-35

CRAFTS, N.F.R (1998) The British economy missing out or catching up? in: FOLEY, B.J. **European economies since the second World War** (Cambridge, Cambridge University Press).

DEER, C. (2002) Higher Education in England and France since the 1980s (Oxford, Symposium).

DEER, C. (2003) La politique d'accès à l'enseignement supérieur. Comparaison entre France & Grande-Bretagne, Agone, 29/30, pp. 99-120.

DE MEULEMEESTER, J.L. & D. ROCHAT (2001) Reforming Education and Training: the European View, **Reflets et Perspectives de la Vie économique**, XL, 4, pp.89-104.

DEVAQUET, A. (1987) L'amibe et l'étudiant: université et recherche, état d'urgence. (Paris, Odile Jacob).

DIMSDALE, N. (1991) British Monetary Policy since 1945, in: CRAFTS, N. & N. WOODWARDS (eds) **The British Economy since 1945** (Oxford, Oxford University Press).

EKINSMYTH, C. & J. BINNER (1994) The Basic skills of young adults, LONDON, ALBSU.

ESQUIEU, P. & POULET-COULIBANDO, P. (2002) Vers un enseignement secondaire de masse (1985-2001) (Paris, INSEE, Education, Formation), 25 sept.

FINEGOLD, D. & D. SOSKICE (1988) **The Failure of Training in Britain : analysis and prescriptions**, Oxford Review of Economic Policy, 4(3), pp.21-53.

FLEMING, J.M. (1962) **Domestic financial policies under fixed and under floating exchange rates**, IMF Staff Papers, 12, pp.369-380.

FOLEY, B.J. (1998) France: A case of Eurosclerosis?, in: FOLEY, B.J. (ed.) European Economies since the Second World War (Basingstoke & London, the Macmillan Press).

FRIEDBERG, E. & C. MUSSELIN (1993), L'Etat face aux universités en France et en Allemagne. Paris, Economica.

JOHNSON, H.G. (1970) The case for flexible exchange rates, in: HALM, G.N. (ed.) Approaches to Greater Flexibility of Exchange Rates (Princeton, Princeton University Press).

GRANT, W. (2002) Economic Policy in Britain (New-York, Palgrave).

INSEE (2002) Tableau de l'économie française 2002-2003 (Paris, INSEE)

JOURNAL OFFICIEL (1989) Loi n.89-486 du 10 juillet 1989 d'Orientation de l'Education (Paris, Journal Officiel).

KENEN, P.N. (1969) The Theory of optimum currency areas: an eclectic view, in: MUNDELL, R. and A.K. SWOBODA (eds) **Monetary Problems of the International Economy** (Chicago, University of Chicago Press).

KITSON, M. & J. MICHIE (2000) The Political Economy of Competitiveness. Essays on Employment, Public Policy and Corporate Performance (London, Routledge).

LAUER, C. (2003) **Bildunspolitik in Frankreich**, Discussion Paper n°03-43, Zentrum für Europäische Wirtschaftsforschung GmbH.

LAWSON, N. (1992) The view from No. 11 (London, Bantam).

LAYARD, R., K. MAYHEW & G. OWEN (1994) Britain's Training Deficit. Aldershot: Avebury..

LEFRESNE, F. (1998) Trajectoires d'insertion en France et au Royaume-Uni, **Revue de l'IRES**, 28 (automne), pp.83-120.

LE GRAND, J. (1993) The theory of quasi-markets, in: LEGRAND, J. & W. BARTLETT (eds) **Quasi-Markets and Social Policy** (London, MacMillan).

LOMBARD, M. (1995) A re-examination of the reasons for the failure of Keynesian expansionary policies in France, 1981-1983, Cambridge Journal of Economics, 19, pp.359-72.

LUCAS, R.E. (1988) On the Mechanics of Economic Development, Journal of Monetary Economics, 22(1), pp. 3-42.

MADDISON, A. (1995) Monitoring the World Economy, 1820-1992. Paris: OECD.

MANACORDA, M. & B. PETRONGOLO (1999) Skill Mismatch and Unemployment in OECD Countries, **Economica**, 66, pp. 211-220.

MAZIER, J. (1999) Les grandes économies européennes (Paris: La Découverte).

MEN (2001) Repères et Références Statistiques sur les enseignements, la formation et la recherche (Paris, MEN).

MERLE, P. (1996) Les transformations socio-démographiques des filières de l'enseignement supérieur de 1985 à 1995 : essai d'interprétation, **Population**, 6, pp.1181-1208.

MICKLEWRIGHT, J. (1989) Choice at Sixteen, Economica, 56, pp. 25-39.

MISSION EDUCATION-FORMATION (1985) Rapport et Recommandations. Bureau d'Informations et de Prévisions Economiques. Quels hommes et quelles femmes pour former l'entreprise de demain ? Prévision des qualifications à l'an 2000

MUET, P-.A. & A. FONTENEAU (1990) **Reflation and austerity: economic policy under Mitterrand** (New-York, Oxford : Berg).

MUNDELL, R. (1961) A Theory of Optimal Currency Areas, American Economic Review, 51, pp.657-665.

MUNDELL, R. (1963) Capital mobility and stabilization policy under fixed and flexible exchange rates, Canadian Journal of Economics and Political Science, 29, pp.475-485.

OECD (1984, 1988, 1992, 1996, 2000, 2002) Main Economic Statistics (Paris, OECD Statistics Directorate)

OECD (1998a) Economic Outlook (Paris, OECD) - by country.

OECD (1998b) Education at a Glance: OECD indicators (Paris, OECD).

OECD (2002) OECD Economic Surveys: United Kingdom (Paris, OECD)..

PLIHON, D. (1991) Les taux de change (Paris, La découverte).

POUPEAU, F. (2003) Décentraliser l'éducation pour mieux la privatiser, **Le Monde Diplomatique**, Juin, pp.6-7.

PREST, A.R. & D.J. COPPOCK (eds) (1982) The UK Economy : A Manual of Applied Economics. London.

PROST, A. (1992) Education, Société et Politiques : une histoire de l'enseignement en France de 1945 à nos jours (Paris, Seuil).

ROMER, P.M. (1990) Endogenous Technological Change, Journal of Political Economy, 98(5), pp. 71-102.

SANDERSON, M. (1999) Education and economic decline in Britain, 1870 to the 1990s (Cambridge, Cambridge University Press).

SELDON, A. & D. COLLINGS (2000) Britain under Thatcher (Harlow Essex, Longman).

SICSIC, P. & C. WYPLOSZ (1996) France, 1945-92, in: CRAFTS, N. & G. TONIOLO (ed.) **Economic Growth in Europe since 1945** (Cambridge, Cambridge University Press).

THAIN, C. & M. WRIGHT (1995) The Treasury and Whitehall. Oxford: Clarendon Press.