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Chapter One

Corporate Governance and International Political Economy: How Changes in the International Monetary Order Brought About the Great Reversal in Corporate Governance and the Great Reversal in Shareholdership

‘We wish to understand on the one hand the relationships and the cultural significance of individual events in their contemporary manifestation, and on the other the causes of their being historically so and not otherwise’

Max Weber\textsuperscript{138}

This Chapter introduces the study’s First Hypothesis: the shift in the institutional logics of corporate governance towards shareholder value (‘Great Reversal in Corporate Governance’) coupled with shareholdership’s increasing short-termism (‘Great Reversal in Shareholdership’) have cumulatively contributed to the low rates of GDP growth that are observed in the major Western economies since the breakdown of the Bretton Woods system in the early 1970s.

As explained in the Introduction (3.1), the First Hypothesis is a story of causality links. The collapse of the Bretton Woods system of monetary management in the early 1970s opened the Pandora’s Box bringing about a series of transformative changes in international political economy that affected irreversibly corporate governance and the set of preferences of (equity) investors. Of course I am not ignorant of the fact that ‘it is difficult to formulate universal claims over time and across cultures because of the mutable nature of institutions and the potential role of free will (that is of actors’ ability to change their minds and pursue new goals)’\textsuperscript{139}, but recent studies on the sequence of events in the post-Bretton Woods world support my conviction that free will must have been a negligible contributing factor to the transformation of the institutional setting\textsuperscript{140}.

Sections 1-6 of this Chapter offer a timeline presentation of the macroeconomic and intellectual events that culminated in these two great reversals in the major Western economies. The analysis covers France,

\textsuperscript{139} Ernst Haas & Peter Haas, \textit{Pragmatic Constructivism and the Study of International Institutions}, 31 \textit{MILLENNIUM JOURNAL OF INTERNATIONAL STUDIES} 573, 584
Germany, the UK and the US (and to a lesser extent The Netherlands) and stops in the mid-2000s, i.e. before the start of the ongoing economic collapse, in order to show that the failures of capitalism were existent even before the cataclysmic events of the post-2008 era. The reader, who is familiar with postwar and post-Bretton Woods economic history or is not interested in the details of these periods’ institutional settings may focus on the textboxes found within the Sections, which provide in a nutshell the impact that the developments at the political economy level had on firms’ orientation towards shareholder value and on the shortening of shareholders’ time-horizons. In addition to this, Figures 9 and 10 provide an illustrative summary of the array of institutional developments that brought about the Great Reversal in Corporate Governance and the Great Reversal in Shareholdership respectively; the two Figures are also suitable for use by readers, who want to quickly gain an understanding of where this Chapter’s discourse is heading to.

Section 7 puts forward the causality links of the First Hypothesis accompanied by relevant empirical data. The two great reversals led to increased payout ratios in the corporations of the major Western economies; that meant lower retention ratios, which in aggregate reduced the growth rate of business capital accumulation bringing about lower rates of GDP growth. The layout of the empirical data in Section 7 and the attempt to provide preliminary logical explanations for the existence of a causation link between the aforementioned trends does not rule out the possibility of a relationship of mere correlation rather than of causation (see Section 7.7). This is why Section 7 should be read in conjunction with Chapter Two that offers an economic model of the impact that shareholder value coupled with short-termism can have on firms’ accumulation dynamics. It is Chapter Two that completes the causation argument embedded in the First Hypothesis.

1. The intellectual substructure of the Golden Age of Capitalism: Keynesian economics

In the post-2008 world governments started looking for ways to drive the economy out of the recession. This is when Keynes was rediscovered (at least in the US and the UK). The rediscovery was either implicit judging from the Keynesian spirit of the policies that governments started implementing in response to the collapse or explicit since there were even direct references to Keynes’s regulatory philosophy in parliamentary speeches and governmental announcements.

Keynes’s theory provided the conceptual basis, on which the economic policies that brought the global economy out of the Great Depression were

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141 See e.g. Alistair Darling’s, UK’s Chancellor of the Exchequer, announcement of the 19th October 2008 about massive government borrowing that would kick-start the British economy, where he explicitly mentioned that ‘Keynes’s ideas are coming back into vogue’.
designed and that guaranteed the rapid growth of the first two postwar decades that have been called the ‘Golden Age of Capitalism’. It was, thus, believed that since the Keynesian recipe worked to take us out of the Great Depression of the 1930s, it would work again to heal the wounds of the 2008 meltdown.

Keynes did a great job in penetrating into the understanding of the deeper pathologies of an economic recession mainly through his magnum opus *The General Theory of Employment, Interest and Money*. He provided us with a very accurate account of why an economy in a recession might not show signs of recovery in response to monetary or other short-term remedies devised by governments. Indeed, during the Great Depression it became a common belief that monetary policy was a string; ‘you could pull on it to stop inflation, but you could not push on it to halt recession’142. Increasing the quantity of money in the economy by having the central bank lower the interest rates just did not seem enough to boost investment and consumption back in the dark days of the 1930s. Keynes explained why and proposed an alternative route: fiscalism instead of monetarism. We’ll see below in Section 1.3 what that means exactly. For the moment let’s focus on the diagnosis of the diseases of a recessionary economy according to Keynes.

1.1. The Keynesian theory on uncertainty and the notion of ‘confidential crisis’

Keynes was not a polemicist of capitalism143; he was simply not victim of the market utopia, in which neoclassicists believed. Keynes generally believed in the price mechanism, in the ability of the market to self-correct, but he thought that the ‘magical’ matching of supply and demand just didn’t work in every case and at least in two segments of the market: the labor market and the capital market144. The latter two are the Achilles’ heel of capitalism. Like Schumpeter and Marx, Keynes also saw capitalism as inherently unstable, but he didn’t believe in the self-healing process of creative destruction; he believed that the economy could remain ‘in a chronic condition of sub-normal activity for a considerable period without any marked tendency either toward recovery or toward complete collapse’145.

As a prophet of the modern field of behavioral economics Keynes argued that much of the inherent instability of the capital markets derives from investors’ irrational behavior. In Keynesian analysis agents do have rational intents; in this, Keynes is in line with the utilitarian tradition and neoclassical economics. However, to Keynes agents are also highly susceptible to psychological forces and therefore, despite their optimal intents, their ultimate

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142 Milton Friedman, *The Role of Monetary Policy*, 58 *The American Economic Review* 1, 1
144 VAROUFAKIS, supra note 4, 284
145 JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY* [1936] (LONDON MACMILLAN - 1973), 249
decisions are subject to the fallible powers of judgment\textsuperscript{146} and thus may not always be rational as neoclassicists assume. This takes us back to the Humean gnome that reason is enslaved: ‘reason is, and ought only to be the slave of the passions’\textsuperscript{147}

In Keynesian theory, irrational decisions are the result of the inevitable problem of uncertainty\textsuperscript{148}, which constitutes a state of intrinsic insecurity that cannot be quantified and thus integrated into the mathematical decision models of the neoclassicists\textsuperscript{149}. Uncertainty translates into partial and vague knowledge and is distinct from the notion of risk\textsuperscript{150}, which has come to be quantified by modern economics\textsuperscript{151}. Putting it in option theory terms, uncertainty is the variability of beliefs, i.e. the greater likelihood of substantial revision of one’s beliefs in the near future\textsuperscript{152}. Without full or at least quantifiable information, the model of the rational agent, as the neoclassical orthodoxy assumes it, does not function properly\textsuperscript{153}. Keynes structured his theory of economic fluctuations around this very notion of uncertainty.

What kind of behavior does uncertainty exactly trigger? In the Keynesian analysis the agent is called to make a decision in the context of an unalterable past and a pernicious future\textsuperscript{154}. The greater the fog surrounding this future the more intense the so-called ‘liquidity preference’ of the agent becomes. ‘Liquidity preference’ is defined as the tendency of people towards retaining a certain amount of their resources in the form of money\textsuperscript{155}; it is the desire to hoard. Consequently, in brief, uncertainty triggers hoarding and reduces the appetite for investment\textsuperscript{156}. This causal relationship between uncertainty and liquidity preference is explained by the fact that uncertainty affects the precautionary and speculative motives for the demand for money, i.e. the desire

\begin{itemize}
\item\textsuperscript{146} Athol Fitzgibbons, \textit{The Microeconomic Foundations of Keynesian Economics. in Keynes, Uncertainty and the Global Economy: Beyond Keynes, Vol. II} (S. Dow & J. Hillard, eds.) (2002), 7
\item\textsuperscript{147} David Hume, \textit{A Treatise of Human Nature, Vol. II} (1739) (1966), 127
\item\textsuperscript{148} William Greer, \textit{Ethics and Uncertainty: The Economics of John M. Keynes and Frank H. Night} (2000), 55
\item\textsuperscript{150} For the distinction between risk and uncertainty see the seminal work of Frank Knight, \textit{Risk, Uncertainty and Profit} (1921)
\item\textsuperscript{152} Robert Jones & Joseph Ostrow, \textit{Flexibility and Uncertainty, 51 Review of Economic Studies 13, 13
\item\textsuperscript{153} The role of uncertainty in the decision making process is also well-documented in experimental decision theory through the Ellsberg paradox that proves that in the presence of uncertainty the expected utility hypothesis, which constitutes the cornerstone of the neoclassical economics’ model of the rational agent, is violated; see Daniel Ellsberg, Risk, Ambiguity, and the Savage Axioms, 75 Quarterly Journal of Economics 643
\item\textsuperscript{154} Paul Davidson, \textit{Money and the Real World} (1973), xii
\item\textsuperscript{155} Jörg Bibow, \textit{On Keynesian Theories of Liquidity Preference, 66 The Manchester School} 238, 239
\end{itemize}
of people to be prepared for unforeseen expenditures. Uncertainty causes a fall in demand for inflexible positions, i.e. those that are less liquid, and an increase in demand for flexible positions.

The causality between uncertainty and an increased liquidity preference seems logical. The question is then what causes uncertainty in the first place. The answer lies in Keynes’s phrase:

Our desire to hold money as a store of wealth is a barometer of the degree of our distrust of our own calculations and conventions concerning the future. The possession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of the degree of our disquietude.

What Keynes implies in the above quotation is that a downward shift in the agent’s state of confidence, in the reliability of her anticipations about the future, is what actually causes uncertainty. In essence, the state of confidence is one of the factors determining the schedule of the marginal efficiency of capital in an agent’s mind. Reduced confidence of investors results in increased uncertainty about the future and ultimately to a reluctance to invest, so as to avoid being trapped in illiquid positions. In other words, distrust translates into uncertainty and further to a shift in liquidity preference. Investment reduces, so does consumption, so the two of the four basic components of an economy’s GDP (\( GDP = Investment + Consumption + Government Expenditure + Net Exports \)) are reduced causing slow growth in the GDP, i.e. stagnation, or –worse- recession, i.e. negative growth in the country’s GDP.

A certain level of non-quantifiable uncertainty is always present in the decision-making of market players. We have learned to live and transact tolerating the small doses of uncertainty that intrude in our decision-making process.

However, there is one type of uncertainty that signifies that the markets are filled with a high level of distrust, that they are experiencing a so-called ‘confidential crisis’, which is essentially what can throw the economy into an irrecoverable downward spiral. It is the uncertainty that is caused by the distrust of the willingness or the aptitude of the other market players to observe

157 JOHN MAYNARD KEYNES, THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY, New York, Harcourt, Brace and World (1936), 168
158 Id., at 170
159 Bibow, supra note 64, 252
160 KEYNES, supra 157, 149
161 We must, however, give credit to Henry Thornton for being the first to articulate the causality relationship between uncertainty and liquidity preference, although he didn’t put it in these exact terms. Thornton viewed the lack of confidence among market players as inducing people to hold money ‘as a provision against contingencies’; see HENRY THORNTON, supra note 120, at 39, 47, 71, 145, 308
162 VAROUFAKIS, supra note 4, 235
commercial rules or worse by the distrust of the rules themselves. The difficulty to get market players (firms or investors) to invest increases as uncertainty regarding the market players’ expectations of one another rises and as frustration about the market’s institutional endowment, i.e. the rules governing the transactions, grows.

From the foregoing analysis a circle of causal relationships (see Figure 5) can be drawn that eventually leads to this situation, which Keynes has described, where the economy cannot be stimulated either by lowering the interest rates or by increasing the money supply, i.e. by the application of orthodox monetary remedies. This situation is called the ‘liquidity trap’.

1.2. The ‘liquidity trap’

Keynes, reflecting his Zeitgeist, developed the notion of the ‘liquidity trap’, when he observed that in the first years of the Great Depression, despite the fact that interest rates were low, there was no increase in investment resulting in a surging unemployment rate. The liquidity trap was a paradox for the monetary/neoclassical orthodoxy that viewed low interest rates as an engine of economic growth. Neoclassicists believe(d) that if interest rates are low then ‘buying’ capital becomes a bargain and so an agent abiding by the Benthamite

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163 Franz Ritzmann, Money, a Substitute for Confidence? Vaughan to Keynes and Beyond, 58 AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY 167, 168
164 BRIAN SNOWDON & HOWARD VANE, AN ENCYCLOPEDIA OF MACROECONOMICS (2002), 437
calculus of utility maximization\textsuperscript{165} would be incentivized to raise capital and then invest the money to boost her output. However, not only during the Great Depression, but also at later points in time, such as Japan’s economic crisis during the 1990s\textsuperscript{166}, the same problem of liquidity trap was present and thus private initiative did not respond effectively to expansionary monetary policies.

After the short exposure to Keynes’s theory about how uncertainty influences the decision-making process of an agent, it is now time to understand how the Keynesian argument about liquidity traps plays out.

Suppose that in the framework of one of capitalism’s usual recessions, there is a fall in demand. This fall freezes the capital markets for a while, as investors see that firms reduce production to equate their supply to the reduced demand. Investors do not want to be exposed to firms with a reducing output and are thus reluctant to hold on to their securities or to buy new ones, so their trading behavior creates a bear market. With diminishing capital being available the firms reduce further their output and thus have to lay off employees to reduce their obligations and remain in a solvent state. As unemployment rises due to the layoffs, consumers’ income falls, since more and more consumers are unemployed, so with less aggregate income available for spending, there will be a further fall in the demand side of the economy. In the face of this recession, the central bank, following the monetary policy dictated by neoclassical economics, pursues a traditional monetary growth policy by lowering the interest rates to make it easier for firms to raise capital, so that they can then increase their output and employ more people. With more people employed the aggregate income of consumers is expected to rise, so the demand side of the economy will rise inducing the supply side to equate it. Thus, it is plausible to expect that the economy will sooner or later be driven out of the recession. But, Keynesian economics argue, that the reduction in the interest rates won’t work this way; markets in the tumult of uncertainty will instead fall in the liquidity trap.

What exactly is the liquidity trap? In the above described economic environment, uncertainty among firms skyrocket. In this climate ‘the facts of the existing situation enter […] into the formation of our long-term expectations’, so the firms are expected to take the depressive situation they are facing and project it into the future in order to make their economic decisions\textsuperscript{167}. It seems logical that in light of this decision-making mechanism firms would be reluctant to invest in production out of fear that demand will keep falling. Their state of confidence in the market, in the rules and in the willingness of other firms to raise capital and invest is shaken.

\textsuperscript{165}Jeremy Bentham is perceived to be the father of the utilitarian tradition, within which the genes of the equi-marginal principle, the foundational principle of neoclassical economics, are to be found. See JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (1798)


\textsuperscript{167}KEYNES, supra 157, 148
This last remark about the state of confidence of firms in other firms brings to the forefront the problem of the coordination failure, which is central to Keynesian economics.

One of Keynes’s axiomatic ideas is that our investment behavior depends—among other factors—largely on the expectations we have of other parties in the investor community. You’re doing what you anticipate others will do as their prime strategy. In this respect, our investing behavior is ‘intersubjective’. In a recessionary economy what you expect of others is that they are going to practice extensive cost-cutting and suspend investment. So, you do the same. The most convenient way for a firm to obtain the goal of keeping costs down, so that it is in line with other competitors, is by laying off more employees, rather than by reducing their wages; reduced wages would cause frustration to the employees, who wouldn’t be so productive. Thus, in this climate of insecurity and distrust every individual firm deciding in isolation is doing the same: cutting the cost of labor and hoarding because of augmented liquidity preference. Therefore, unemployment rises even more, so demand will fall even more. What firms feared would happen, i.e. a fall in demand, is actually caused by their own actions.

Under general uncertainty what seems to be efficient for every single firm individually, is actually inefficient for the economy as a whole and thus ultimately ends up being inefficient for every single firm. If firms were able to surmount the distrust problem and coordinate, so as to agree that they would all stop laying off people, then a further fall in demand could be prevented. The economy would stabilize again and the firms would be able to gradually start investing again leading the system out of the recession. This collective action problem, where what benefits the individual harms the collective good, is typical of an under-regulated market and disproves the existence of some sort of self-correction mechanism.

As a result of the aforementioned chain of events caused by the idiosyncratic incentives, to which an economic crisis gives birth, firms, investors and consumers will develop a ‘fetish of liquidity’ and will be driven to practice extensive hoarding. Stocks’ and bonds’ prices fall, as investors are willing to

168 Keynes, supra 157, 47
170 Keynes’s axiom on how the decisions an investor makes depend largely on his expectations of what other investors will do is depicted in a brilliant metaphor he makes (Keynes, *supra* 65, 156): ‘professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of other competitors, all of whom are looking at the problem from the same point of view. […] We have reached the … degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be.’
have less money invested in securities, so as to have more money immediately available for them; banks won’t lend out to firms and consumers, as they want to have liquid reserves for the hard times that they see ahead. Everyone takes divestment decisions. But, saving with the mentality of hoarding does not translate into investment. Thus, more hoarding means less growth; more hoarding means more poverty. After all, capitalism is all about taking risks, so without daring to act, the capitalist economy cannot work.

Thus, while each market participant looks to her own self-interest everyone is in aggregate worse off. The intersubjective nature of investing behavior, which during recessions causes pessimism, shows that the market alone cannot bring the economy out of the slump. Nor monetary remedies alone can fix this situation. But, the GDP equation shows that policymakers have another weapon in their arsenal to spur economic growth: government spending.

1.3. Keynesian fiscalism

The message of Keynes’s General Theory was that government spending could make up for insufficient private investment; it could preempt savings that would finance private capital formation. The gap between what people earn and what they consume would be counterbalanced by governmental investment in the economy. In addition to this, tax reductions could also compensate for hoarding and the ensuing reduction in demand. In general, a more interventionist economic policy could save the day.

According to Keynes the way, by which the government could intervene to drive the economy out of the cyclical fluctuations that capitalism would inevitably bring, was the application of expansionary fiscal policies. This government-managed recovery meant running a deficit budget by increasing government spending and reducing personal income taxes. As revenues would fall short of expenses the financing of the deficit would require borrowing on behalf of the state. However, despite the leverage, the multiplier effect, which meant that for every government dollar spent demand is expected to rise for more than one dollar, and the increase in households’ take-home pay because of the tax reductions were two factors expected to boost consumer spending. As consumer spending would increase, firms would get to sell more, which would require them to hire more people. Thus, expansionary fiscal policies were believed to lower unemployment and increase the economy’s GDP – i.e. bring the growth that would bring the economy out of the slump. For instance, deficit spending on behalf of the US government during World War II,

171 Jacqueline Best, Hollowing out Keynesian Norms: How the Search for a Technical Fix Undermined the Bretton Woods Regime, 30 REVIEW OF INTERNATIONAL STUDIES 383, 388
172 See James Meade, A Simplified Model of Mr. Keynes’ System, 4 REVIEW OF ECONOMIC STUDIES 98
174 Id., at 9
so as to finance the military operations, has been credited with driving the American economy out of the Great Depression with the US GDP growing by 17.10% in 1941, 18.50% in 1942 and 16.40% in 1943 and unemployment reaching an all-time low of less than 2% in 1943.175.

In general, the theme of Keynesianism was economic growth and full employment. After all, growth would provide the resources, which directed to the government through taxes, would finance the welfare state envisioned by policymakers in the postwar world. Price inflation—the salient economic evil under monetarism—was indeed not the top priority of macroeconomic policy, but was not ignored altogether, as popular anti-Keynesian views would suggest. This is because fiscal policy was not only used to fight recessions, but also to help prevent hyperinflationary phenomena during booms. For instance during the Korean War taxes were introduced in the US in order to restrain the demand, which was threatening price stability.177.

As it was mentioned in the beginning of this chapter, Keynesian ideas about macroeconomic management were prominent during the Golden Age of Capitalism, an era of high rates of economic growth and low rates of unemployment.178

Although during this period there was a de facto need for reconstruction that helped spur economic growth, Keynesian fiscalism did its part by making sure that the recessionary periods that would inevitably appear during this period would not be felt so severely. In almost every recession during the Golden Age fiscal stimulus was applied to promote recovery; and it saved the day in many instances.

For instance, the US economy was characterized by trade surpluses in the period 1945 to 1965; these surpluses were recycled into foreign direct investment that helped to finance the growth of other countries, mainly in Western Europe.179. When these US trade surpluses started shrinking in the mid-1960s the fuel of global growth seemed to start depleting until Johnson’s Administration undertook expansionary fiscal measures that boosted consumer spending in the US market (Johnson’s ‘Great Society’ program), which thus kept welcoming imported products, in turn allowing other countries’ net exports to remain steady and hence their GDP to keep rising.180.

176 Growth would produce the resources, which collected then by the government through tax, would also help pay for the sovereign debt that expansionary fiscal policies required in the first place.
177 Tobin, supra note 173, 29.
180 Id., at 11.
2. The macroeconomic institutions of the Golden Age: the Bretton Woods system

2.1. A legal analysis of the Bretton Woods Agreement

2.1.1. The bitter experience of the Great Depression

The experience of the Great Depression, when liquidity preference posed a firewall between central bank low interest policies and consumer spending behavior, made economists and policymakers distrust the potency of monetary measures. The preference of Keynes and his followers for fiscal rather than monetary stimulus reflects this bitter experience.

The prevalence of the Keynesian ideology during the Golden Age is reflected in the fact that at least until the mid-1960s low interest rates were maintained not so much as a matter of direct macroeconomic policy, but in order to hold down interest payments in the government budget and thus lower the government’s cost of debt service. In general, credit policy by central banks was not perceived to be a great remedy for recession and the evil of inflation could be fought with other measures rather than by raising the interest rates.

To be sure though, Keynes himself in his General Theory did not advocate for a complete demise of monetary measures, but certainly saw them as having a subsidiary role to the fiscal technology of demand management.

The subsidiarity of monetary policy was embedded in the Bretton Woods Agreement, a multilateral international treaty establishing an international monetary order that was concluded in 1944 within the scope of the United Nations Monetary and Financial Conference under the official title ‘Articles of Agreement of the International Monetary Fund’ (‘the Bretton Woods Agreement’). Keynes himself being Britain’s main negotiator in the Conference was one of the two main architects of the new international monetary order and therefore secured his intellectual imprint on the Bretton Woods Agreement’s provisions. The other main architect was Harry Dexter White, the principal US negotiator, a New Dealer also fond of Keynesian ideas. Therefore, it comes as no surprise that the Agreement introduces certain structures that maximize the ability of the states to employ fiscal policies and impose certain limitations on the flexibility of the domestic monetary authorities.

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181 Tobin, supra note 173, 31
182 For this trend in the US see Friedman, supra note 142, 2; for this trend in the UK see Eric Helleiner, States and the Reemergence of Global Finance (1994), 32
184 Keynes, supra note 157, 378
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of the states-parties to the Agreement. Therefore, its provisions can be thought of as partially responsible for the unpopularity of countercyclical monetary policy during the Golden Age.

As an international monetary system Bretton Woods featured first of all an exchange rate regime\(^\text{185}\). The architects of the Agreement wanted to outlaw what was thought of back then as the ‘beggar-thy-neighbor’ exchange rate management that was employed by many states during the Great Depression in their effort to recover\(^\text{186}\).

As foreign lending by the US declined in 1928 and the world was falling into the recession, a series of countries in Western Europe found out that the fact that their currency was pegged to gold (‘the gold standard’) did not allow them to use monetary technology to fight the economic slump. The gold standard meant that the value of a country’s currency unit (e.g. one franc, one reichsmark, one dollar) was kept constantly equal to a certain weight of gold\(^\text{187}\). This did not permit the state to exercise control over the money supply; money supply could only grow if the reserves of gold grew. In other words, domestic monetary authorities could not print more money, if they did not have in reserve enough gold to back it\(^\text{188}\). By not having discretion over money supply, they did not have the ability to depreciate the country’s currency, so as to increase the competitiveness of their exporting products and help the economy recover by pumping up the net exports constituent of the GDP equation\(^\text{189}\).

In absence of international monetary law or in the presence of a negligible international monetary law of customary origin\(^\text{190}\) the solution was simple and seemed to rest at the discretion of the sovereign: abandon the gold standard and depreciate the currency.

Great Britain officially suspended the gold standard in 1931 and it was soon followed by all the Scandinavian and the Benelux countries\(^\text{191}\). At the same time these countries’ currency was devalued, as they were afraid they would lose the exports race to others that were already depreciating\(^\text{192}\). A kind of race to the bottom ensued on the lines of a policy of ‘each-country-for-itself-and-the-

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186 ‘Beggar-thy-neighbor’ policies are seen as attempts to ameliorate a country’s economic fate at the expense of its neighbors.
190 Stephen Zamora, *Sir Joseph Gold and the Development of International Monetary Law*, 23 *The International Lawyer* 1009, 1011
191 League of Nations Economic Intelligence Service, *Monetary Review* (1937), Appendix-Table 1
devil-take-the-weakest\textsuperscript{193}; the race has also been coined as ‘competitive depreciations’,\textsuperscript{194}.

At the same time, the hoarding tendency, which -as explained under 1.1 and 1.2 above- emerges due to the insecurity that prevails in a state of recession, was creating deflation in many countries; i.e. reduced demand for goods and services that drives the prices down. This was a nightmare for indebted households and institutions that could no longer make the income to service their loans that were extended at higher nominal values back in the days when prices were higher. As the depreciating countries were flooding the deflationary countries with their underpriced products, demand for domestic products in the latter countries was reduced even more throwing them deeper into the deflationary spiral.

2.1.2. Exchange rate stability: pegging national currencies to the US dollar

To prevent the phenomena of the Great Depression from occurring again, the delegates in Bretton Woods opted for tighter controls on the value of currencies; exchange rate stability was a desideratum of the Bretton Woods Agreement\textsuperscript{195}.

Exchange rate volatility was also believed that it would adversely affect international trade, as businesses would have to hedge against exchange-rate risks, and that would make the maintenance of postwar peace more difficult\textsuperscript{196}. Therefore, according to the Bretton Woods Agreement exchange rate management would no longer be left at the sole discretion of the sovereign, but the legal authority over it would be divided between the International Monetary Fund (‘IMF’) and the states-parties to the Bretton Woods Agreement\textsuperscript{197}.

Consequently, under Article IV of the Bretton Woods Agreement a par value or pegged rate currency system was established. All states that were parties to the agreement were required to establish a fixed relationship between their national currency and the US dollar of the weight and fineness in effect of July 1, 1944 [Article IV, Sec.1 (a) of the agreement]. The dollar of that date was

\begin{footnotesize}
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\item[193] John Horsefield, The International Monetary Fund, 1945-1965: Twenty Years of International Monetary Cooperation (1969), 40
\item[194] Eichengreen & Sachs, supra note 192, 929
\item[195] ‘We need an orderly and agreed method of determining the relative exchange values of national currency units, so that unilateral action and competitive exchange depreciations are prevented’; John Maynard Keynes, Proposals for an International Clearing Union (1943) in The International Monetary Fund, 1945-1965: Twenty Years of International Monetary Cooperation (J. Keith Horsefield, ed.) (1969), 20
\item[196] To put it in the words of Cordell Hull, the then US Secretary of State, who played a major role in shaping the Bretton Woods Agreement ‘unhampered trade dovetailed with peace’; Cordell Hull, The Memoirs of Cordell Hull, Vol. 1 (1948), 81
\item[197] Richard Myrus, From Bretton Woods to Brussels: A Legal Analysis of the Exchange-rate Arrangements of the International Monetary Fund and the European Community, 62 Fordham Law Review 2095, 2098
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\end{footnotesize}
of fixed gold content, which was expressed in the relationship of $35 per troy ounce. It follows that a par value of any other national currency expressed in terms of that dollar was also fixed in terms of gold, although indirectly\(^{198}\). In other words, all countries were supposed to peg their currencies to the US dollar, which would take over the role that gold played in the gold standard system. Every state-party to the Bretton Woods Agreement undertook vis-à-vis the IMF the obligation to determine the initial par value of its currency based on the exchange rates prevailing in the market on the 60\(^{th}\) day preceding the entry into force of the Agreement [Article XX, Section 4 (a)].

2.1.2.1. How was exchange rate management effectuated by states? Sovereigns bound by the Bretton Woods Agreement incurred the obligation to take action in order to continuously render the initial par value of their currency against the dollar effective as the basis for exchange transactions. It was the state’s responsibility to ensure that exchange transactions between currency traders taking place in its territory involving the national currency and the currency of another party-state were kept within certain limits of the parity relationship between them\(^{199}\). To be more precise, states were mandated to guarantee that spot exchange transactions\(^{200}\) would not differ from parity by more than 1% [Article IV, Section 3(i)]. The measures, by which each state would perform its obligation, were not defined in the agreement.

The common practice, by which monetary authorities would intervene in the exchange market by purchasing or selling US dollars—or possibly, albeit rarely, other foreign currencies—within the 1% margin from parity set by the Bretton Woods Agreement, was deemed by the IMF as an appropriate measure that a country could take to fulfill its obligation to maintain the relative par value of its currency.

The only country that employed a different technique to fulfill its obligations under the agreement was the US that, instead of intervening in the exchange market by standing ready to deal in foreign currencies, it maintained the parity value of the dollar by being prepared to engage in gold transactions. The US negotiated for this practice to be explicitly included in the agreement as also fulfilling the exchange stability obligation of a country [Article IV, Section 4(b)] and thus it notified the IMF that it continuously stood ready to redeem US dollars on the request of foreign monetary authorities for the already determined $35 per ounce.

To sum up, a state would not be deemed to be fulfilling its exchange rate stability under the agreement if it remained utterly passive and abandoned the determination of its currency’s exchange rate to the market forces of supply and demand. Not taking action in the face of the occurrence of exchange

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\(^{198}\) Joseph Gold, *The Legal Structure of the Par Value System*, 5 *Law & Policy of International Business* 155, 157

\(^{199}\) Id., at 177

\(^{200}\) Transactions completed by telegraphic communication within 48 hours from the time the contract is entered into.
transactions outside the margins, would effectively mean letting the currency float and floating would be an outright violation of the obligations incurred under the Bretton Woods Agreement according to the Annual Report of the Executive Directors of the IMF for 1951.\(^{201}\)

### 2.1.2.2. The role of monetary policy in the Bretton Woods system

The Bretton Woods Agreement did not want to create merely a *sub rosa* gold standard for the postwar world and thus on the lines of the motto ‘stability without rigidity’ it was ready to accommodate changes in the initial par value of a national currency\(^{202}\). A sovereign could propose to the IMF a change in the currency’s par value to correct balance of payments problems; if the proposed change in the currency’s par value did not exceed 10% of the initial par value, the IMF would raise no objection and the state could proceed without IMF’s concurrence [Article IV, Section 5(c)(1)]. A monetary expansion or contraction that would revalue or devalue the currency for more than 10% compared to the initial par value would not be prohibited *per se*, but it would require the concurrence of IMF that should be satisfied that the proposed change was necessary to correct a fundamental disequilibrium in the state’s balance of payments [Article IV, §5(a)].

While –in light of Article IV- the system was not one of entirely fixed, but somewhat adjustable, parities and still allowed the application of monetary policy on behalf of the states, it discouraged games with money supply, which partly explains the unpopularity of monetary policy during the Golden Age. Substantial changes in the money supply were only allowed with IMF’s permission and only in a case of fundamental disequilibrium, which although not defined in the Agreement, came to mean that a country would be allowed to devalue or revalue only to restore its medium-run balance of payments rather than to promote short-term countercyclical policy\(^{203}\). The system was not as harsh as the gold standard, but still it fostered stability in international trade by not encouraging opportunistic changes in monetary policy.

However, the hardcore Keynesian spirit of the Agreement pertaining to the use of demand management monetary tools was gradually hollowed out as the so-called ‘neoclassical synthesis Keynesians’ became more influential in the design of domestic macroeconomic policy, starting by their appointment at Kennedy’s Council of Economic Advisers in 1961\(^{204}\). A combination of fiscal policy and monetary policy effectuated through a synthesis of government expenditure, tax reduction and easing of credit and interest rates was employed from 1961 onwards to fight the post-1957 stagnation and the high unemployment rates\(^{205}\). To the extent that the US played a dominant role in the

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\(^{201}\) IMF, Annual Report (1951), 38
\(^{202}\) United Nations Monetary and Financial Conference, 2 Proceedings and Documents 1213 (US Department of State Pub., No. 508, 1948)
\(^{203}\) Williamson, supra note 185, 74
\(^{204}\) George Bach, Making Monetary and Fiscal Policy (1971), 112
\(^{205}\) Tobin, supra note 173, 426
Bretton Woods system and the staffing of the IMF the ascent to dominance of
the neoclassical synthesis Keynesians influenced other states-parties to the
agreement and affected the macroeconomic policies that IMF was indicating to
countries that had recourse to its financial assistance to reduce their deficits.
Thus, monetarism entered as a ‘Trojan horse’ into Keynesian economics and
was on the rise again from the late 1960s. We’ll see later in this chapter how it
gained momentum in the early 1970s and came to prominence in the ensuing
decades.

2.2. The Bretton Woods system and the restrictions on capital movement

2.2.1. The economic rationale behind capital controls: ‘The irreconcilable
trinity’ of the Mundell-Fleming model

Apart from the parity value exchange regime that the Bretton Woods
Agreement introduced into the new international monetary order another
hallmark of the Bretton Woods system were the limitations on free capital flows
between countries. Capital controls were deemed essential by both Keynes and
White in order for the new model of interventionist government to work without
external constraints. The consensus that exists today among orthodox
economists that capital controls are detrimental to economic efficiency because
they prevent productive resources from being used where they are most needed
did not exist back then.

But, how would free capital flows affect sovereign fiscal and monetary
policy? To provide a well-founded answer to this we need to have recourse to a
neo-Keynesian model that emerged during the 1960s in the subfield of
international macroeconomics: the Mundell-Fleming model.

This model indicates that there exists an ‘irreconcilable trinity’ or a
‘trilemma’ in the formulation of international macroeconomic policy. No
country can have all three of the following at the same time: fixed exchange
rates, monetary independence and free movement of capital. Inevitably,
priorities should be set and the policy choice made will determine the range of
possibilities a state can have. Pegging your exchange rate and being open to
capital flows would mean losing your monetary independence. Preserving your
monetary autonomy and also adopt a libertarian stance towards capital flows
would mean having to function under a floating exchange rate regime.

206 HELLEINER, supra note 182, 33
207 Christopher Neely, An Introduction to Capital Controls, FEDERAL RESERVE BANK OF ST LOUIS
REVIEW (November/December 1999), 13
208 See Robert Mundell, Capital mobility and stabilization policy under fixed and flexible exchange rates,
29 CANADIAN JOURNAL OF ECONOMIC AND POLITICAL SCIENCE 475; Marcus Fleming, Domestic
Financial Policies under Fixed and Floating Exchange Rate, 9 IMF STAFF PAPERS 369
Preserving both monetary autonomy and wanting to have a fixed exchange rate regime means closed financial markets.

In the Bretton Woods system one of the three above choices was given. As we saw, there was a somewhat flexible but in general relatively fixed exchange rate system to exclude ‘beggar-thy-neighbor’ practices in the future. Therefore, the choice that was now left according to the Mundell-Fleming model was between monetary independence and free movement of capital. The preservation of monetary independence would secure that monetary policy would at least be able to fulfill its subsidiary role under Keynesian macroeconomics. Monetary policy could be used as a secondary tool of demand management or as a tool to monetize public debt, which would greatly ease the application of expansionary fiscal policies. Therefore, free movement of capital would come to be sacrificed within the Bretton Woods system to ensure that countercyclical macroeconomic policies would enjoy a complete arsenal of fiscal and monetary weapons.

Keynes epitomized the above logic by stating that ‘the whole management of the domestic economy depends upon being free to have the appropriate rate of interest without reference to the rates prevailing elsewhere in the world; capital control is a corollary to this’. Accordingly, Article VI sec. 3 of the Bretton Woods Agreement stated that ‘members may exercise such controls as are necessary to regulate international capital movements’.

Here is how, according to the Mundell-Fleming model, the effectiveness of a state’s monetary policy is mitigated in the presence of fixed exchange rates and international capital mobility. Suppose that within the scope of a general effort to fight a recession, there is an interest rate decrease on behalf of the central bank to complement the expansionary fiscal measures. In presence of these low interest rates, if capital is free to move, it would be induced to flow out of the country in search of countries with higher interest rates, where the profit for the capital’s usage can be higher. This movement of funds out of the country means that demand for this country’s currency reduces. It follows that the exchange rate of the country’s currency will reduce as well. If the country though has pledged to keep a fixed exchange rate, its central bank would have to

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To understand what the monetization of debt is consider the following example: Suppose that a country wants to pursue along Keynesian lines expansionary fiscal policy in order to fight a recession or a state of stagnation. It needs to run a budget deficit for a while. The government may want to issue bonds to the public to finance the deficit spending. There are several ways then to finance the repayment of the sovereign bonds, taxation being the most obvious one. Another way is by monetizing the debt. In simple words, this means that the central bank would acquire the debt from the public. The banks that are holding the government securities as bondholders will sell them to the central bank and as a result will see their reserves go up and thus they won’t need to borrow so much any more. Thus, demand for interbank loans will decrease causing interest rates in general to decrease. The government would come to benefit from these low interest rates, as borrowing for it would become cheaper. The monetization of public debt was back in the Golden Age, when central bank independence was not so solid, a popular method for financing deficit spending. For instance it was used during the 1940s in the US in order to ease the US government’s deficit military spending.

\[ \text{\textsuperscript{210}} \] IAN ARCHER, TRANSACTIONS OF THE ROYAL HISTORICAL SOCIETY, VOL. 18, SIXTH SERIES (2009), 4
use its foreign exchange reserves to buy back its own currency in order to create demand for the country’s currency. This buyback removes currency units (money) from the markets, thus resulting in an effective reduction in the money supply. Such a monetary contraction means that less money is available to lenders and borrowers and thus interest rates will inevitably rise again. The rise in the interest rates will cancel the earlier lowering; the easing of credit on behalf of the central bank would thus not be effective because of the combination of fixed exchange rates and capital mobility.

Thus, neither fiscal policy—which would be impaired if there could be no possibility for public debt monetization through monetary measures—nor monetary policy could be pursued independently by the government because of the threat of arbitrary capital outflows. Therefore, countercyclical activist macroeconomic policy on behalf of the states could not be obtained without certain controls on capital outflows.

International capital mobility would not only impair a government’s ability to fight recessions. Capital flight in particular could impose an undue balance of payments constraint on domestic macroeconomic objectives by compromising a country’s effort to build and maintain a welfare state. The postwar settlement between workers and employers, especially in Europe, was the creation of the welfare state, which was thus viewed as a way of maintaining social peace. By keeping capital in the domestic economy the taxation of wealth and interest income would be facilitated in order for the state to gain revenues and gather the resources necessary to run the welfare state. Otherwise, as the Bretton Woods Agreement’s architects were afraid, capital would be induced to flow out of the country, in order to escape the burdens of the welfare state and would thus halt the government’s desire to promote policies of growth and employment.

The fact that the Bretton Woods system wanted to preserve the unfettered ability of the states to fine-tune their economies without external constraints was also evident by the fact that even, when a state proposed a revaluation or devaluation exceeding 10% of the initial par value in order to correct a fundamental disequilibrium in its balance of payments, the IMF could not object to the proposed change on the grounds that there were other ways to restore the equilibrium, such as deflationary policies etc. [Article IV, Section 5(f)].

2.2.2. The mechanics of capital controls

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212 Karel Davids & Greta Devos, Changing Liaisons: The Dynamics of Social Partnership in 20th Century Western European Democracies (2007), 41
213 Hellineer, supra note 206, 34
The non-preference for free capital movement should not trick us into believing that the Bretton Woods system promoted isolationism as a recipe for the avoidance of contagious crises. To the contrary, the Bretton Woods Agreement strived to promote international trade, as its architects believed that the latter would have a stabilizing function in the postwar world.\(^\text{214}\)

To understand how the agreement managed on the one hand to allow restrictions on the free movement of capital for the sake of not impairing the effectiveness of governmental activist policies and on the other hand to encourage multilateral international trade we need to have an insight into how a country’s balance of payments works.

### 2.2.2.1. Current and capital account

A sovereign’s balance of payments sheet records all transactions between the country and the rest of the world.\(^\text{215}\). All payments that go out to foreigners and all payments that come into the country from foreigners are depicted there. The sheet comprises of two parts: the current account part and the capital account part. In the current account part the cross-border trade, in which the country is engaged, is recorded. In the capital account part the cross-border sales and purchases of assets are depicted.

To be more precise, in the current account part a country records all its receipts due to goods exported to foreigners and all the payments it made to import goods from foreigners.\(^\text{216}\). Apart from transactions pertaining to exported goods and imported goods the current account part shows also receipts due to service exports and payments attributable to service imports. Finally, current account records so-called ‘factor income’, i.e. a payment in exchange for the use of physical capital or the use of the principal on a loan.\(^\text{217}\). Thus, sums that the country’s residents received from foreigners as interest for a loan they had extended or as a dividend for a share they had acquired and payments by the country’s residents to foreigners that are classified as interest and dividend all belong to the current account.

A capital account covers all transactions associated with change of ownership in international financial assets and liabilities.\(^\text{218}\). All private and public capital transfers belong here; direct investments in foreign firms from residents, direct investments in domestic firms from foreigners, acquisition of foreign securities by residents, acquisition of domestic securities by foreigners, lending to foreigners, borrowing from foreigners etc.

\(^{214}\) William Scammell, International Monetary Policy: Bretton Woods and After (1975), 115

\(^{215}\) John Sloman, Economics (2004), 516


\(^{217}\) Id.

\(^{218}\) Id. at 67
A country’s capital account balance must equal and be opposite in sign from its current account balance\textsuperscript{219}. A deficit in the current account is always accompanied by an equal surplus in the capital account and vice versa\textsuperscript{220}. This is because a country that imports more goods and services than it exports (i.e. current account deficit) must pay for those extra imports by selling assets or borrowing money (i.e. capital account surplus).

Under the Bretton Woods Agreement states undertook the legal obligation not to impose --without the approval of the IMF- restrictions on the making of payments and transfers for current international transactions (Art. VIII Sec. 2). That meant that currencies were to be convertible if a resident or a foreigner wanted to buy foreign or domestic exchange respectively for the purpose of effectuating a transaction that would be then recorded on the current account\textsuperscript{221}. Current account convertibility was a prerequisite for international trade to take place and thus the states, which were parties to the agreement, were given a grace period of five years after the establishment of the IMF to liberalize their current accounts\textsuperscript{222}.

While current accounts had to be liberalized and exchange controls were not to be applied, the same did not apply to capital accounts. Under Article VI it rested within the state’s own discretion to implement policies that were designed to limit or redirect capital account transactions.

Capital controls were limiting asset transactions either through price mechanisms (mainly taxes) or through quantity controls, i.e. quotas or explicit prohibitions\textsuperscript{223}. In a world of fixed exchanged rates, such capital controls could be either outward -i.e. restricting capital outflows- designed to empower a weak currency or inward -i.e. restricting capital inflows- to alleviate the pressures towards appreciation of the currency\textsuperscript{224}. For example, Britain consistently employed outward controls to prop up a weak sterling, while during the same era Germany employed inward controls to protect the deutsche mark from appreciation, which would compromise Germany’s export-led development strategy\textsuperscript{225}.

\textbf{2.2.2.2. The example of US capital controls}

\textsuperscript{219} Neely, supra note 207, 14
\textsuperscript{221} Barry Eichengreen, Globalizing Capital: A History of the International Monetary System (2008), 96-97
\textsuperscript{222} Nonetheless, most states significantly exceeded this grace period to liberalize their current accounts first because of the failure to establish the International Trade Organization in the late 1940s that would help coordinate the simultaneous reduction of tariffs and quotas and also because of the poor job that the first three GATT rounds did in this respect.; see Eichengreen, supra note 221, 99
\textsuperscript{223} Neely, supra note 207, 23
\textsuperscript{224} Richard Marston, Interest Differentials under Bretton Woods and the Post-Bretton Woods Float: The Effects of Capital Controls and Exchange Risk, in \textsc{A Retrospective On the Bretton Woods System: Lessons for International Monetary Reform} (M. Bordo & B. Eichengreen, eds.) (1993), 519
\textsuperscript{225} James Crotty & Gerald Epstein, In Defence of Capital Controls, \textsc{The Socialist Register} 1996, 118
Two interesting examples of outward capital controls and also of the reasons why a sovereign might want to introduce them were the US interest equalization tax (‘IET’) that survived for about a decade, from 1963-1974 and the Voluntary Foreign Credit Restraint Program (‘VFCR’) introduced in 1965 and repealed in 1973.

Since the days of the Korean War the US was experiencing a balance of payments deficit. A country’s balance of payments is the sum of the current account balance and the capital account balance; it thus indicates the summary of all economic transactions between a country and the rest of the world for a given period of time.

The US had a trade surplus in these years, which meant that it had a current account surplus; it had though a capital account deficit, whose absolute number exceeded the current account surplus. This ensued from the fact that the trade surplus did not offset the private demand for foreign assets. That meant that the US was sending abroad more dollars than it received from its exports.

This was due to the fact that after the end of World War II there was a dollar shortage in the world. European nations had to repay their wartime loans and needed liquidity to import commodities and energy that would help them reconstruct. International liquidity under the Bretton Woods system could be provided only by the issuance of dollars, which were the global reserve – as they were convertible into gold and trading currency. As a global reserve currency, the US dollar was essential, since it would first be used by other nations’ central banks as their main constituent of foreign exchange reserves, which would get to be used in the markets if the domestic currency had to be stabilized and second it was the currency, in which many products and commodities traded in the international market were priced.

As Europe was a net importer at the time, no dollars were flowing in to help the European nations achieve those goals. In order not to endanger the infant postwar economic and political stability the US decided to flood the world economy with dollars. The European Recovery Program - more commonly known as the ‘Marshall Plan’, i.e. US aid to Europe, US military spending abroad within the scope of the Korean War and the maintenance of US military troops in Germany and both governmental and private US foreign direct investment in Europe and Japan created a balance of payments deficit that reached $3.7bn in 1959.

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228 Neely, *supra* note 207, 24
230 Mark Randal Brawley, *Power, Money and Trade: Decisions that Shape Global Economic Relations* (2005), 320
231 Zoumaras, *supra* note 226, 173
This dollar glut made the global economy starting to have less confidence in the ability of the US to convert the dollar into gold. The dollar growth was less than the gold reserves growth in Fort Knox\textsuperscript{232} and it was thus commonly believed that the dollar was overvalued. It will be shown later in this Chapter (3.1) that as these misgivings escalated, the Bretton Woods system collapsed with the closing of the ‘gold window’ by President Nixon.

A country in the position of the US would theoretically have certain policy alternatives to correct this balance of payments deficit and thus close the dollar gap. For instance, it could devalue the currency to make it more expensive for Americans to buy foreign goods, services and assets; the current account would mark a greater surplus as the US would export more and import less. But, this would compromise the exchange rate stability of the Bretton Woods system. In addition to this, the Fed (the US central bank) could reduce the money supply and thus create deflation; domestic goods, services and assets would become cheaper, foreign goods, services and assets would become more expensive and thus the reduced demand for foreign goods and assets would eliminate the balance of payments deficit. The contraction in the money supply though would reduce domestic demand and employment, which has highly undesirable in these Keynesian years. Furthermore, again the exchange rate would be affected and under Bretton Woods that wasn’t an option.

The only option that seemed to work in order to maintain the fixed exchange rate and not affect the money supply was to restrict capital outflows by the introduction of an outward capital control. Governmental dollars would keep flying out of the country to support US foreign policy, but private dollars would have to stay inside the US to restore the deficit in the balance of payments.

US investors were attracted by the high interest rates prevailing in continental Europe. The Continent did not have deep capital markets yet and thus there was great demand for the limited capital funds that existed, which made the latter more expensive and thus the rentiers of capital able to charge higher interest rates\textsuperscript{233}. The Kennedy administration, thus, opted for discouraging US investors from investing their money abroad by introducing the IET, a tax scheme, according to which interest profit and capital gains realized on foreign assets would be taxed at high rates. It was hoped that this would reduce direct capital outflows. The Johnson administration in the same line of policy introduced the VFCR that called banks to voluntarily refrain from extending credit to foreigners\textsuperscript{234}. In response, the Fed issued some guidelines to US commercial banks asking them to keep the amount of foreign lending in 1965 to 105% of the level of 1964\textsuperscript{235}.

\textsuperscript{232} This is the seat of the US Bullion Depository, where official gold reserves are kept.
\textsuperscript{233} NASROLLAH SAIFPOUR FATEMI, WHILE THE UNITED STATES SLEPT (1982), 31
\textsuperscript{234} PETER DOMBROWSKI, POLICY RESPONSES TO THE GLOBALIZATION OF AMERICAN BANKING (1996), 41
\textsuperscript{235} Id., at 46
3. The deconstruction of the Golden Age: The breakdown of the Bretton Woods system

3.1. The Deutsche mark floating and the ‘Nixon Shock’: The fulfillment of the ‘Triffin Dilemma’ prophecy

The US balance of payments deficit reduced for three years in a row (1964-1966), not so much because of the IET as some clever international tax planning helped US investors channel their gains in countries like Canada that were exempted from the tax but because of short-run high interest rates that attracted capital into the US. But any surpluses in the private balance of payments were swallowed up by the dollar outflow originating from the US government that had to send an increasing amount of dollars abroad to finance the military operations in Vietnam. Thus, the US kept running a balance of payments deficit and since the late 1960s it was also moving from a trade surplus to a trade deficit. In 1971 the US marked its first trade deficit since 1893. The trade deficit was largely due to a boost in US demand caused by short-term monetary stimulus that the government hoped would help fight the 1969-1970 recession, which in turn ensued by fiscal tightening and stringent monetary policies deemed necessary to tide up the fiscal mess and the inflation the Vietnam war was causing.

A US trade deficit meant more imports and hence more dollars ending up abroad. At the same time US monetary expansion in 1970-1971 combined with low interest rates in the US resulted in more capital flowing abroad and ending up mainly in the Federal Republic of Germany (a.k.a. West Germany) and Germany was considering for a while a revaluation of the mark, which was thought it would help fight inflation by slowing down the German exports, but there would be political costs by such a decision. A revaluation would also help reduce the times the intervention point for the Bundesbank would be reached and thus as the latter would get to

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236 Id., at 32
237 The Federal Funds Rate, the short-term interest rate that banks charge one another for loans, which greatly influences all interest rates to the same direction, was up from 3.18% in 1963 to 5.11% in 1966; Source: Board of Governors of the Federal Reserve System.
238 Source: US Census Bureau, Foreign Trade Division
240 This monetary expansion has been characterized as excessive, as many have sought to accuse the Fed of eventually starting the chain of events that led to the demise of Bretton Woods, but data show that the monetary expansion in the US was lower compared to that of other nations during the same period; see Robert Heller, International Reserves and World-Wide Inflation, 23 INTERNATIONAL MONETARY FUND STAFF PAPERS 61, 67
241 Capital inflows to Germany in 1970-1971 amounted to $9.6bn; HAROLD JAMES, INTERNATIONAL MONETARY COOPERATION SINCE BRETON WOODS (1996), 215
242 Id., at 215
sell less marks in the foreign exchange market the money supply would stop expanding so fast.

Finally, in May 1971 Germany decided not to observe its obligations under the Bretton Woods Agreement to take appropriate measures to preserve the trading of its currency in its territory within the ±1% margin and thus suspended official exchange market operations. The deutsche mark floated and the determination of its relative value was left to the forces of supply and demand. Apparently, Germany’s decision was in breach of Article IV of the Agreement and the IMF could apply sanctions, such as declaring Germany ineligible to use its funds or require her to withdraw from the IMF. However, the IMF did not exert its discretion to apply sanctions against Canada and Mexico, when they in 1950 and 1948 respectively floated their currencies, so it wasn’t expected to do it in Germany’s case.

In the meantime, the continuation of the dollar glut led to a further erosion of confidence in the dollar, as it was now clear that it was overvalued compared to gold. In 1970 the US gold reserves could cover 55% of the liabilities the US had undertaken vis-à-vis foreign central banks by pledging to convert dollars into gold for $35/ounce and in 1971 the gold coverage went down to 22%. The figures led to a run on US gold as France moved to redeem $191 million in gold and Switzerland another $50 million. In response, on the 15th of August 1971 President Nixon announced that it had directed the Secretary of the Treasury to suspend convertibility of the dollar into gold sending out waves of shock to the international economic community: the ‘Nixon Shock’.

While Nixon’s televised presidential address per se on an August Sunday evening in 1971 shocked foreign monetary officers, as no one outside the White House –or, for the sake of accuracy, Camp David- was expecting such a decision would be made, the fact that the Bretton Woods monetary order would reach this state at some point in time did not come as a surprise to knowledgeable economists. This is because back in 1959 a Belgian-American economist, Robert Triffin, testified before the US Congress on the long-run prospects of the Bretton Woods monetary system concluding that there was a fundamental internal contradiction in the way it was designed.

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244 For the sanctions that the IMF could impose on members that were not observing their Bretton Woods obligations see Joseph Gold, *The ‘Sanctions’ of the International Monetary Fund*, 66 AMERICAN JOURNAL OF INTERNATIONAL LAW 737
245 Joseph Gold, Unauthorized Changes of Par Value and Fluctuating Exchange Rates in the Bretton Woods System, 65 AMERICAN JOURNAL OF INTERNATIONAL LAW 113, 125
246 PEIJE WANG, THE ECONOMICS OF FOREIGN EXCHANGE AND GLOBAL FINANCE (2009), 432
248 7 WEEKLY COMPIILATION OF PRESIDENTIAL DOCUMENTS 1170 (1971).
The problem was onwards coined as the ‘Triffin Dilemma’ and is summarized in the ascertainment that there was a conflict between the short-term domestic macroeconomic policies that the state issuing the reserve currency, i.e. the US, would want to implement and the long-term viability of the global economy. The increase in demand for international liquidity could be satisfied only if more of the reserve currency was issued and supplied to the world. That meant though that the US would have to keep on running a balance of payments deficit, which would lead to the reduction of the gold coverage of the dollar and gradually to the erosion of the confidence in the reserve currency. However, if the US wanted to prevent confidence in the dollar from being lost and opted for tiding up the balance of payments deficit, it would have to tighten its monetary policy, which would result in the international community losing its largest source of additions to reserves. A reserve shortage would ensue and the global economy would be thrown in a deflationary spiral again. We now know that in the end, the US chose to push the monetary accelerator and a run on the dollar emerged.

3.2. The causality relationship between the demise of Bretton Woods and the oil shocks of the 1970s

3.2.1. The Smithsonian Agreement, the ‘Snake’ and the ‘dirty float’

The Nixon shock is commonly attributed with ending the Bretton Woods system of fixed exchange rates. From a legal point of view US’s unilateral suspension of the external convertibility of the dollar into gold did not terminate the Bretton Woods Agreement nor did it suspend its validity or signified US’s withdrawal from it according to the rules of public international law. The Bretton Woods Agreement was still valid and enforceable. However, the US breached its obligations under the Agreement and gave a legal justification to other state-parties to refrain from observing some of their obligations as well. To understand this we need first to identify what was the obligation that the US breached. Contrary to what most would expect, the violation was not the fact that the US suspended its willingness to convert dollars into gold. As it was explained above, under Article IV Section 4 this was only one of the appropriate measures that a country could take to observe its exchange rate stability obligation and it was a voluntary undertaking on behalf of the US.\footnote{Joseph Gold, \textit{Strengthening the Soft International Law of Exchange Arrangements}, 77 \textit{American Journal of International Law} 443, 447} If the US despite the suspension of convertibility stood ready to intervene through the Fed’s agents in the exchange markets in order to maintain dollar’s relative par value vis-à-vis other currencies, then there would be no breach whatsoever. Indeed, there was nothing in Nixon’s presidential address that suggested that the US was not willing to intervene in the exchange
markets251. However, the Secretary of the Treasury in a press conference that he
gave the very next day announced that the US had no plans to even intervene in
the market to keep the dollar within the margins of the Bretton Woods Agreement252. This was the moment of breach of the agreement on behalf of the US.

After that move by the US the other states-parties to the Bretton Woods
Agreement were entitled on the basis of established principles –which are rules
of public international law deriving from custom- not to intervene in the
exchange market in order to ensure that transactions between their own
currencies and the dollar were kept within the agreement’s margins253. The
principle was that each state was obliged to maintain the value of its currency
and this burden could not be transferred to other states254. Therefore, after some
costly initial efforts on behalf of some states, like Japan, to intervene by
purchasing dollars, in order to support the old parity between their currency and
the dollar, soon states remained passive in the exchange markets and the world’s
major currencies started floating against each other255. The Bretton Woods
Agreement stopped having practical effect and the world moved from a fixed to
a flexible exchange rate regime.

The floating lasted for four months until in December 1971, after a
multilateral negotiation effort, the ten countries (G-10)256 participating in IMF’s
General Arrangements to Borrow –an additional source of financing for the
IMF257- produced an agreement outside the IMF that aspired to revive the par
value system. This agreement that has come to be known as the ‘Smithsonian
Agreement’ was followed by an almost identical IMF decision, which would
temporarily bind the non G-10 IMF members in lieu of the practically ignored
Bretton Woods Agreement 258. Within the scope of the Smithsonian Agreement
and the IMF decision most major currencies were revalued while the dollar was
devalued by 8%. The new permissible margins around the par value of the
currencies were set at 2.25% compared to the 1% determined by the Bretton
Woods Agreement and countries undertook the obligation to preserve the
relative value of their currencies within these new wider margins259.

But, the Smithsonian Agreement proved to be stillborn and never
actually culminated to a new Bretton Woods-style agreement under the auspices

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251 Available to watch at: http://www.youtube.com/watch?v=iRzr1QU6K1o
253 Gold, supra note 245, 191-192
254 Id., at 125
255 JAMES, supra note 241, 220
256 USA, Japan, Canada, Belgium, Federal Republic of Germany, France, Italy, The Netherlands, Sweden
and United Kingdom.
257 The General Arrangements to Borrow (GAB) were adopted by Decision No. 1289 – (62/1) of 5
January 1962 of the Executive Board of the International Monetary Fund; to be found at SELECTED
DECISIONS AND SELECTED DOCUMENTS OF THE IMF (1995), 305
258 Decision No. 3463-(71/126), see Gold, supra note 245, 193
259 Leland Yeager, From Gold to the ECU – The International Monetary System in Retrospect, 1 THE
INDEPENDENT REVIEW 75, 89
of the IMF, which would restore the disorder in the international monetary system. In early 1973, as the US further devalued the dollar by 10%, it became impossible for the states to resist the forces of money speculators that were pushing the US dollar even further downwards. Thus, after massive purchases of dollars on behalf of some central banks that were hoped to keep the exchange rate of their currency vis-à-vis the dollar within the Smithsonian margins, interventions were gradually abandoned and all major currencies were floating again against the dollar and against each other. The only exception to the ‘dirty float’ that ensued were the currencies of the countries of the European Economic Community (EEC), which were tied together in 1972 through the Basel Agreement (more commonly known as the ‘Snake’); the EEC currencies were allowed to fluctuate within ±2.25% to each other and EEC central banks with the help of a new European Monetary Co-operation Fund\(^\text{260}\) pledged to provide one another intervention support for their currencies and no longer in dollars\(^\text{261}\) (see more under 4.2.1. below).


\(^{261}\) PIERRE LOUIS HAEGEN & JOSÉ VINALS, REGIONAL INTEGRATION IN EUROPE AND LATIN AMERICA: MONETARY AND FINANCIAL ASPECTS (2003), 62
3.2.2. International reserves accumulation, oil price shocks, inflation and current account deficits

The demise of the Bretton Woods system brought more changes to the global economy than just the transition from fixed to fluctuating exchange rates. As confidence in the dollar eroded in the face of the Nixon shock, the devaluation that took place within the scope of the Smithsonian Agreement and the ‘dirty float’, private households, financial institutions and corporations worldwide wanted to shift their assets from dollars to other currencies, which were appreciating in the new international monetary landscape\(^{262}\).

The private sector found an eager partner to engage in the currency exchange transaction with: the central banks. As the latter were still under the obligation before the Nixon shock and during the short-lived Smithsonian Agreement to maintain the parities of their currencies vis-à-vis the dollar, they were seeking to purchase dollars so as to resist the tide of speculation that

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\(^{262}\) Heller, *supra* note 240, 70-71
pushed the dollar downwards\textsuperscript{263}. As the central banks were purchasing the dollars and adding them to their foreign exchange reserves in return for their own currency, more of the latter was injected into the domestic economies thus increasing the high-powered money.

As a general rule, foreign reserve accumulation increases the monetary base in an economy\textsuperscript{264}. The increase of the monetary base causes through the money multiplier – i.e. a process, by which the original amount of fresh funds injected by the central bank into the banking system multiply the amount of money ‘created’ by banks and lent out to consumers and enterprises\textsuperscript{265} - a monetary expansion in an economy, which in turn increases aggregate demand. The increase in aggregate demand usually translates in an increase in imported products into the country. Considering the time lag between the international reserve accumulation and the changes it brings in aggregate demand, the reserve growth of the years 1970-1972 might have partially contributed to the current account deficits that many countries developed in the years 1973-1974\textsuperscript{266}.

However, the main causal factor in the aforementioned current account deficits was the dramatic increase in oil prices that occurred during the first half of the 1970s. As net oil payments from oil-importing nations to oil-exporting countries increased, the current account of the former was pushed to the deficit side.

Contrary to the common perception about the oil shock of 1974 the cause was not merely the use of oil as a political weapon on behalf of the OPEC\textsuperscript{267} countries vis-à-vis the US and other western nations for their support to Israel in the Yom Kippur War of October 1973\textsuperscript{268}. It is true that there was a 20% cutback in the oil supply on behalf of OPEC nations in response to the Arab-Israeli conflict of 1973 which was reflected in higher oil prices, but the true reason behind the dramatic increases in the price of oil are to be found in the dollar devaluation that ensued in the post-Nixon shock period.

Oil contracts were priced in dollars, so as the dollar started devaluing, the OPEC nations naturally felt that although they were making the same nominal profit per oil barrel as before, their real profit was lower; sales revenues were eroded by the inflation of the dollar. Therefore, they concluded the Teheran Agreement of 1971 and amended it in 1972 in order to call for an increase of 8.49% in the posted price of oil, which corresponded to the analogous rise of the price of gold vis-à-vis the dollar\textsuperscript{269}. As the US dollar further devalued during the ‘dirty float’ in the last third quarters of 1973, the

\textsuperscript{264} Heller, supra note 240, 64
\textsuperscript{265} DEAN CROUSHDIE, MONEY AND BANKING: A POLICY-ORIENTED APPROACH (2006), 4593
\textsuperscript{266} VICTOR ARGY, THE POSTWAR INTERNATIONAL MONEY CRISIS: AN ANALYSIS (2006), 89
\textsuperscript{267} Organization of the Petroleum Exporting Countries.
\textsuperscript{269} David Hammes & Douglas Wills, Black Gold – The End of Bretton Woods and the Oil-price Shocks of the 1970s, IX THE INDEPENDENT REVIEW 501, 506
OPEC nations raised on January 1, 1974 the price of oil barrel from $4.31 to $10.11\(^{270}\) to compensate themselves for the devaluation; a 300% increase compared to the pre-1973 price levels\(^{271}\).

3.3. Financing the current account deficits: Petrodollar recycling and capital account liberalization

The oil shock of 1974 led oil-importing countries to move from a current account surplus to a current account deficit. The current account of the OECD countries moved from a $10.5bn surplus in 1973 to a $26bn deficit in 1974\(^{272}\). Even those export nations, such as Germany, that resisted the oil spikes of the immediate post-Bretton Woods years were not able to resist the oil shock of 1979\(^{273}\), which was caused by cutbacks in the world oil supply due to the Iranian Revolution. While in 1978 the price of crude oil per barrel was at $13.66, in 1979 it skyrocketed to $30.73 and only came back to the 1978 levels in 1988\(^{274}\). The persistence of high prices over most of the 1980s was due to a combination of factors including the 1980 to 1988 war between Iran and Iraq, which greatly disrupted oil exports, but also the placement of greater quantities of oil by oil-exporting countries on the spot market, where prices were vulnerable to speculation and thus upward pressures\(^{275}\).

While oil-importing nations were accumulating current account deficits, oil-exporting nations were having excessive current account surpluses. This situation laid the foundations for the emergence of a new spontaneous global surplus recycling mechanism (‘GSRM’)\(^{276}\), much like the one that appeared in the first postwar decades were the US was recycling its trade surpluses by exporting capital to Europe and Japan. Only that in this new GSRM the US along with other nations was standing on the receiving side of the surpluses. As it will become evident in the next section, this reversal in the flow of the surplus recycling was one of the factors that brought about the Great Reversal in Shareholdership.

The new GSRM, which I will call the ‘Petrodollar Recycling Mechanism’ (‘PRM’), was a means of financing the current account deficits through the channeling of the OPEC countries’ surpluses to the oil-importing

\(^{270}\) Id., at 511

\(^{271}\) IVAN GOODBODY, NATURAL RESOURCE MANAGEMENT FOR SUSTAINABLE DEVELOPMENT IN THE CARIBBEAN (2002), 314


\(^{273}\) The German current account moved from a 17.5bn DM surplus in 1978 to a 10.5bn DM deficit in 1979; See John Goodman & Louis Pauly, The Obsolescence of Capital Controls? Economic Management in an Age of Global Markets, 46 WORLD POLITICS 50, 62

\(^{274}\) KAMRAN DADKAH, THE EVOLUTION OF MACROECONOMIC THEORY AND POLICY (2009), 129


\(^{276}\) The term appears to have been coined by YANIS VAROUFAKIS in THE GLOBAL MINOTAUR: THE TRUE CAUSES AND NATURE OF THE CURRENT ECONOMIC CRISIS (2011), Ch. 4
countries. While the balance of payments financing during the Bretton Woods era was done mainly by the IMF and only 1/3 of the financing was intermediated by private financial institutions, the post-1974 balance of payments financing was predominantly done through capital inflows by the private credit markets\textsuperscript{277}. As the aggregate amount of balance of deficits that ensued from the oil shock of 1974 could not be financed by the IMF despite the set up by the latter of ad hoc oil facilities and as at the same time the OPEC countries could not absorb by means of investment in their domestic economies the stock of petrodollars that was accumulated by their oil exports, the OPEC countries were looking for opportunities abroad\textsuperscript{278}. As international supply of petrodollars by oil-exporting countries and demand for capital inflows by oil-importing countries met, the PRM ensued; a self-equilibrating adjustment of the balance of payments problem.

But there was one obstacle to the PRM functioning. The existent capital controls that countries had imposed under the discretion given to them by the Bretton Woods Agreement. Therefore, if countries wanted to finance their current account deficits they would have to lift capital controls, particularly those that limited capital inflows. Consequently, the need for financing the current account deficit became the dominant force behind the trend towards capital account liberalization that started in 1974 and culminated in the early 1990s.

\textsuperscript{277} Benjamin Cohen, Balance-of-Payments Financing: Evolution of a Regime, 36 INTERNATIONAL ORGANIZATION 457, 457-458
\textsuperscript{278} Id., at 470-471
The Petrodollar Recycling Mechanism and the Great Reversal in Shareholdership

Without the private financial institutions (mainly commercial and investment banks) that intermediated between the oil-exporting and oil-importing nations in the 1970s, the governments of the latter nations would not have been able to manage the trade deficits that the oil spikes were causing. These financial institutions were actually underwriting huge quantities of government bonds, ensuring to the governments of the oil-importing states the funds that they needed to cope with the increased fiscal exigencies of the Great Stagflation (i.e. an era of high inflation and slow growth). As a result of the fees these financial institutions were receiving as underwriters and intermediaries, they accumulated huge quantities of funds, which allowed them to become major investors in the post-Bretton Woods equity markets, which are thus characterized by a growing percentage of institutional ownership of stock. Growing institutional ownership of stock marks the divorce between the decision to buy stocks from the decision of which shares to buy; this decision is increasingly made through models that favor diversification (modern portfolio theory) and that are not based on specific flesh-and-bone-collected information that is conducive to produce a long-term perspective on the equity position in a specific firm.

4. The macroeconomic institutions of the post-Bretton Woods world

4.1. The capital account liberalization movement

While, as it was shown in Section 2.2, capital controls were an essential device of the postwar macroeconomic management, the urge to finance current account deficits initiated an era of policies of capital decontrol across a great number of industrial states between the mid-1970s and the early 1990s. However, while the necessity to finance current account deficits was the catalyst for the abolishment of the prohibition on capital inflows, it is less obvious how the monetary and commodities crisis of the 1970s prompted states to liberalize capital outflows. This can only be shown by means of country-specific studies,
which had already liberalized capital inflows before the 1970s crisis and in the
wake or aftermath of the Bretton Woods deconstruction were forced to lift
outward capital controls as well.

Given that the demise of the capital controls may be causally linked to
the reversal in the time-horizons of shareholdership, it is worth looking at the
details of the capital account liberalization movement at this stage of the study.

4.1.1. The demise of capital controls in the US

The outward capital controls that the US introduced in the 1960s,
mainly the IET and the VFCR, resulted in many US banks shifting foreign
operations to their offshore branches, in order to avoid the reach of US
regulatory authorities.279 US banks’ foreign subsidiaries’ activities in Europe
reinforced the so-called ‘Eurocurrency’ or ‘Eurodollar’ market, the market in
which European banks were extending financing denominated in dollars. In
addition to this, as the foreign subsidiaries of US non-financial corporations
were decreasingly able to secure financing directly from the domestic offices of
US banks, they increasingly turned to the Eurocurrency market contributing to
its further expansion.280

Therefore, the 1974 OPEC surpluses found the Eurocurrency market in
its heyday and the OPEC countries chose to place their liquidity there mainly in
short-term deposits.281 The banks of the Eurocurrency market performed their
maturity transformation function by lending out for the medium-term the
deposited OPEC funds to the public sector in countries with balance of
payments deficits. The extensive network of US banks’ subsidiaries, such as
Citibank, Chase Manhattan or Morgan Guaranty in the Eurocurrency market
canalled a large proportion of the funds into the domestic US capital markets
and as capital was flowing inside the US the IET and VFCR outward capital
controls were repealed282 giving US investors again a way out from the interest
ceilings on deposits that the Fed had imposed under Regulation Q (see Section
5.5.1).

The US was able to repeal first out of all nations its capital controls, as
it could rely on the sophistication of the US-owned financial intermediaries that
were operating abroad in order to channel petrodollars into Wall Street. Now
that capital was flowing in, US banks were left free again to engage in cross-
border financial activities thus contributing to the international financial
integration that started in the 1970s.

279 DOMBROWSKI, supra note 234, 42
280 Goran Bergendahl, The Euromarket and OPEC Oil Revenues: A Study of Banking Intermediation,
OXFORD INSTITUTE FOR ENERGY STUDIES (1985), 4. Available at
http://www.oxfordenergy.org/wpcm/wp-content/uploads/2010/11/F3-
TheEuromarketandOPECOilRevenuesASudyofBankingIntermediation-GBergendahl1985.pdf
281 Id., at 6-7; David Llewellyn, The International Monetary System since 1972: Structural Change and
4.1.2. The demise of capital controls in the UK

It was mainly via the UK that US banks were trying to do business abroad and escape the US outward capital controls. While the number of foreign banks in London was 113 in 1967, it rose to 349 in 1974 and most of them were actually US-controlled. With the presence of the US banks London became the hub of the ‘Eurocurrency’ market in the midst of the PRM.

The British economy stood to benefit from the PRM, as the channeling of OPEC funds into the UK would help finance the country’s trade deficit, which was at the level of £5.5bn in 1974 compared to only a £2.5bn deficit in 1973. So, in 1974 $6bn OPEC funds flew in the UK and sterling became a petrocurrency with $2.5bn OPEC deposits denominated in sterling. But, could these inflows instead of being just a necessary liquidity injection into the British economy, mark the beginning of an upward pressure to the sterling that could force the UK to liberalize its capital account entirely?

At the same time that London was receiving OPEC funds, the sterling assets of some oil exporting countries, particularly of those that had traditional ties with the former British Empire, such as Nigeria and Kuwait, marked a dramatic increase amidst the oil price hikes, since a proportion of oil contract payments was denominated in sterling. But, demand for sterling rose even more when the UK-based US banks started financing the North Sea oil and gas exploration and expectations were created that the UK would soon become an oil-producing nation.

Indeed, these developments resulted in the sterling receiving upward pressure, thus making British products less competitive in the international trade arena. Between 1973 and 1974 the loss in exports was about 3.5% and that did not serve well the new Labour Government’s plans for the development of a state-led ‘industrial strategy’. However, at the same time Britain was struggling with the inflation that the oil hikes-spurred commodity boom had caused. Harold Wilson’s Government’s unwillingness to cut down public spending did not help to curb these inflationary pressures. Thus, money markets’ confidence in the British Government’s policies decreased and in turn the pressure on the sterling reversed, as the currency started depreciating. This was a very unpleasant

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283 William Clarke, Inside the City: A Guide to London as a Financial Centre (1983), 251
286 Britton, supra note 284, 22
288 Britton, supra note 284, 22
290 Schenk, supra note 285, 369
development, since inflation and exchange rate are negatively correlated; when the currency depreciates inflation rises and vice-versa. A downward spiral emerged, where inflation fears prompted investors to divest from the sterling and the divestment itself was causing even more inflation. Once the sterling broke the $2.00 barrier in March 1976, a run on the sterling occurred and despite Bank of England’s intervention in the currency markets, sterling’s value in June 1976 was already at $1.70.

In the aftermath of the run on its currency, the UK could either wait for the market sentiment regarding the sterling to reverse or it could take action by bolstering the reserves position and restore confidence in its currency. It decided to follow the latter route and in June 1976 the G10 countries along with Switzerland and the Bank for International Settlements (‘BIS’) provided a $5.3bn standby credit to the Bank of England. Nonetheless, downward pressure to the sterling continued and in November 1976 a loan to the British Government from the IMF started being negotiated, as the risk that the G10-scheme lenders would not be repaid at the maturity of the loan in December 1976 was viewed as realistic.

Negotiations with the IMF resulted in a stand-by arrangement of $3.9bn to the UK, almost immediately after which the sterling started appreciating again. The total appreciation is also to be attributed to the start of the North Sea oil exploitation in 1977. Oil companies were expected to increase demand for sterling, as they would require the currency to pay for tax and royalties, so money investors saw the sterling as a good investment and demand for it increased.

In order for the appreciation not to harm the British exports, the Bank of England attempted to intervene again by selling pounds, but the intervention increased the inflationary pressure on the British economy and thus in October 1977 the sterling was allowed to float freely.

The need to alleviate the inflationary pressure on the British economy, as well as the fact that starting from 1978 the UK had a current account surplus, created a tendency to dismantle the UK capital control apparatus. British banks had the tendency to invest overseas, so the Government could take advantage of this and let money flow out of the country, thus relaxing the inflationary pressure. Moreover, capital outflows would not play their destabilizing role any more by harming the balance of payments position, as the UK was a current account surplus country now and there was no urgent need to lock funds inside the country, so as to finance a deficit.

291 For a case study on this negative correlation see R.W. Hafer, Does Dollar Depreciation Cause Inflation? FEDERAL RESERVE BANK OF ST. LOUIS, JULY/AUGUST 1989, 16
292 Schenck, supra note 285, 371
293 Id., at 375
294 See Marian Bond & Adalbert Knöbl, Some Implications of North Sea Oil for the U.K. Economy, IMF STAFF PAPERS 363
295 Story & Walter, supra note 289, 232
Thus, after the Conservatives won the elections of 1979, one of the first initiatives the Thatcher Government took was to progressively relax capital controls, so as to introduce some downward pressure on the sterling rate. In June 1979 the Chancellor of the Exchequer announced its intention to liberalize outward direct investment gradually with the pace of relaxation depending on sterling’s strength and in October 1979 the UK had completely liberalized its capital account.

4.1.3. The demise of capital controls in Germany

Germany was facing different challenges at the macroeconomic level compared to the US and the UK during the Bretton Woods and the early post-Bretton Woods era, so it followed a different route regarding its capital controls regulation, which, nonetheless, led to the same result: that of complete capital account liberalization.

From the early 1950s Germany started developing a current account surplus. Capital outflows would, therefore, not harm its balance of payments position, so contrarily to other countries it had no reason to install severe outward capital controls. Indeed, already from 1958 export of capital from Germany was permitted without authorization, as currency convertibility was restored both for current account and capital account transactions.

The discussion in Germany during the Bretton Woods period and the transition years of the 1970s was around the perseverance or demise of inward capital controls. German policy-makers were very reluctant in lifting inward capital controls, as the ‘holy grail’ of economic policy in post-war Germany was price stability and the inflow of capital into the Federal Republic was thought that it would import inflation. Although the presence of capital controls coincided with the Keynesian perception, whose imprint was omnipresent in the macroeconomic institutions of the Bretton Woods world, capital controls in the Federal Republic were not of Keynesian inspiration, but rather of a German-specific, ‘ordo-liberal’ form of monetarism.

‘Ordo-liberalismus’ emerged from the anti-statist Freiburg School of the 1930s and 1940s that advocated for a ‘social market economy’ (Sozialemarktwirtschaft), where the state would not be interventionist, but would foster the conditions that would allow the stability that the private business sector needs to flourish. Keynesian reflationary policies were rejected by German ordo-liberals, as they would increase inflation.

\[296\text{ FORREST CAPIE, THE BANK OF ENGLAND: 1950S TO 1979 (2010), 766}\]
\[297\text{ Id., at 766}\]
\[298\text{ Goodman & Pauly, supra note 273, 60}\]
\[300\text{ Wilhelm Röpke, The Guiding Principle of the Liberal Programme, in STANDARD TEXTS ON THE SOCIAL MARKET ECONOMY (H.F. WÜNCH, ED.) (1982), 188}\]
The reason why the Germans had a special sensitivity to inflation was the bitter experience of the Weimar Republic’s hyperinflation of the early 1920s, which wreaked havoc on the inter-war German economy and was thought of as partially responsible for the development of a public sentiment that favored the gradual rise of National Socialism to power. The German government financed its military efforts during World War I by borrowing instead of by introducing taxes and the German Reichsbank (the central bank of the era) helped in the financing effort by monetizing the public debt, thus flooding the economy with printed Papiermarks, which thus quickly started depreciating.

Since then the wider public in Germany believed in the critical importance of monetary stability, a precondition of which was thought to be the central bank’s independence from an inflation-prone government; an independence that gained legal status in the Bundesbank Act of 1957.

The Bundesbank (the Federal Republic’s central bank) had a difficult task in fending off the upward pressures on the mark, as Germany was a trade surplus country during the Bretton Woods era and thus demand for its currency was high. To alleviate these pressures the Bundesbank intervened by selling marks. Therefore, the intervention per se was causing inflation. Now, if the Bundesbank wanted to eliminate this source of inflation, it could revalue the mark, so that its selling intervention wouldn’t be necessary anymore. But, a revaluation of the mark would harm German products’ competitiveness and thus harm Germany’s export-led growth strategy. Therefore, the only option left was to keep in place the prohibition on capital inflows.

Bundesbank’s resistance to the revaluation of the mark broke down in 1969 and inward capital controls were thus lifted. But they were introduced again in 1971, as the mark started appreciating after massive inflows into the Federal Republic from the US that was experiencing a monetary expansion (see Section 3.1).

A few years later, in 1974, after the first oil shock Germany remained a surplus country. Thus, prima facie it had no reason to relax inward capital controls in order to finance a trade deficit through capital inflows. However, from 1973 onwards with the breakdown of the Bretton Woods Agreement the German mark was floating vis-à-vis the dollar. That meant that the Bundesbank

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301 Wolfgang Fischer, Hyperinflation 1922/23, in GERMAN HYPERINFLATION 1922/23: A LAW AND ECONOMICS APPROACH (W. Fischer, ed.) (2010), 66 (linking the rise of National Socialism to the hyperinflation of the 1920s on the basis of the fact that in Adolph Hitler’s political manifesto, Mein Kampf, there are references to the sovereign German debt).

302 John Maynard Keynes, THE ECONOMIC CONSEQUENCES OF THE PEACE (INDOEUROPEAN PUBLISHING.COM, 2010), 110


305 Goodman & Pauly, supra note 273, 60

306 Id.

307 Id.
would not have to intervene any more in the foreign exchange market by selling marks, thus expanding the money supply and generating inflation. As one source of inflation was eliminated, capital inflows started seeming to be less threatening. And indeed after the second oil shock in 1979 capital inflows were perceived not only to be less threatening, but actually necessary, as Germany turned from a DM 17.5bn surplus in 1978 to a DM 10.5bn deficit in 1979 and required a source of deficit finance. Faced with this challenge the Bundesbank had no other option but to completely liberalize the capital account in 1981 and allow Germany to benefit from the PRM.

4.1.4. The demise of capital controls in France

The economic boom that France experienced during the Golden Age is to a significant extent attributable to an idiosyncratic French model of development that was established during the French Fourth Republic (1946-1958) and that was greatly influenced by the ideology of the French Resistance during the occupation of France by the Axis powers in World War II.

The spirit of the French Resistance favored the adoption of national economic planning and the French Administration came up with the first plan to reconstruct and modernize the economy in 1946 with the initiator being Jean Monnet (‘Monnet Plan’). The French policymakers gradually developed a model of ‘state-led developmentalism’, where an interventionist state was using subsidies and subsidized credits in order to create well-capitalized ‘national champion’ firms that could withstand international competition and excel in international trade, which was continuously deepening during the Golden Age as a result of the GATT negotiating rounds of Geneva (1947), Annecy (1949), Torquay (1951), Geneva (1956), Dillon (1960-61) that contributed to the reduction of tariff barriers and of the Kennedy round (1964-67) that aspired to address non-tariff barriers. These policies were reinforced in the early years of the French Fifth Republic (1958-) as a result of de Gaulle’s ‘politics of grandeur’.

The developmental policy philosophy aimed to promote investment over price stability; according to the Monnet Plan productive investment was to be promoted ‘at all costs’. For this purpose a series of public and semipublic lending institutions were set up to provide credit to the French economy.

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308 Id.
310 See HENRI MICHEL, LES COURANTS DE PENSEE DE LA RESISTANCE (1962)
311 See Frances Lynch, Resolving the Paradox of the Monnet Plan: National and International Planning in French Reconstruction, 37 THE ECONOMIC HISTORY REVIEW 229
312 Id., at 259
313 Sofía Perez, From Cheap Credit to the EC: The Politics of Financial Reform in Spain, in CAPITAL UNGOVERNED: LIBERALIZING FINANCE IN INTERVENTIONIST STATES (M. LORIAUX ET AL., EDs.) (1997), 203
314 FRANÇOIS CARON, AN ECONOMIC HISTORY OF MODERN FRANCE (1979), 273
industry. The seemingly endless availability of state-sponsored credit to French firms turned France into an ‘overdraft economy’. An overdraft economy is one, where economic agents have assured borrowing power; an economy where economic agents are susceptible to a variation of the ‘soft budgets constraints’ syndrome, which existed in socialist economies, where the state could not commit not to finance a failing firm. In an overdraft economy it is difficult for the monetary authorities to control the growth of credit and implement monetary policy with the result being the development of an inflationary bias, as the one that characterized France during the Bretton Woods and the early years of the post-Bretton Woods era.

Here is why a so-called ‘overdraft economy’, such as the one that existed in France, has an inherent tendency to inflation: In textbook economic theory, when demand for credit increases because of an increase in overall economic activity, the price of credit increases too, so that eventually demand for credit levels off. This is a market mechanism that slows down monetary expansion and thus combats inflation. Now in an overdraft economy, where the conviction among economic agents exist that borrowing power is assured, an increase in the price of credit will be dealt with by economic agents through increased borrowing on their behalf; after all, there is confidence among debtors that they will be able to roll over the more expensive debt that they take on. Thus, an overdraft economy possesses no market mechanism to slow down monetary expansion.

The inflationary bias of the French economy created a persistent downward pressure on the French franc and a congenital foreign exchange reserve shortage. This led to outward capital controls being present at almost all times and capital inflows prohibited only in extreme circumstances, such as during the dollar crisis in 1971. However, the tightening of exchange controls was particularly acute following periods of fiscal and monetary expansion, such as in 1958 during the Algerian War and after the events of May 1968, which were increasing the downward pressure on the franc. In other periods, during which France was experiencing a strengthening of its balance of payments position and a rise on its central bank’s reserves, outward capital controls were to some extent relaxed.

An example of relaxation of outward capital controls was the abolishment in 1962 of the ‘devises-titres’ market, where residents that wanted

315 Janos Kornai, The Soft Budget Constraint, 39 KYKLOS 3
317 Indeed, from the first years of the Fourth Republic the Bank for International Settlements in a report it issued on the French economy noticed the effect the overdraft economy had on the behavior of French economic agents by stating that ‘the businessmen, knowing that they could count on additional credit that they needed, may have opposed less resistance to nominal wage and price increases’; BIS, LA SITUATION ÉCONOMIQUE ET FINANCIÈRE DE LA FRANCE APRÈS LA GUERRE (1949), A 28
318 MICHAEL LORIAUX, FRANCE AFTER HEGEMONY: INTERNATIONAL CHANGE AND FINANCIAL REFORM (1991), 62-63
319 AGÉ BAKKER & BRYAN CHAPPLE, ADVANCED COUNTRY EXPERIENCE WITH CAPITAL ACCOUNT LIBERALIZATION (2002), 6
to invest in foreign securities had to acquire the foreign exchange necessary for the transaction from resident sellers of foreign securities at a market-clearing rate. But, the ‘devises-titres’ market was reestablished in 1969 after the events of the French May of 1968.

President de Gaulle decided to deal with French citizens’ discontent in May 1968 by raising wages. This caused inflation that resulted in a flight from the franc to the deutsche mark. In response, the Banque de France intervened in the foreign exchange market by purchasing francs, losing about $3bn in foreign exchange reserves. The government considered devaluing the franc, but the US feared that this would upset the international monetary system, so it orchestrated a $2bn rescue package to address the problem of Banque de France’s foreign exchange shortage.

Along with the extension of the rescue package outward capital controls were tightened, including the resurrection of the ‘devises-titres’ market, to prevent the franc from depreciating even more, as short-term capital would flee the country. Eventually though the franc was devalued by 11.1% in August 1969 adding another episode to the international monetary crisis of that year, which, as it will be shown below (Section 4.2), prompted the initiation of the European Economic and Monetary Union, another institution that contributed to the concerted capital account liberalization of the post-Bretton Woods era.

However, as in almost all other countries, it was the demise of the Bretton Woods monetary order during the early 1970s that contributed decisively to the French abolishment of capital controls. In the case of France, though, the causality link between the breakdown of the system of fixed exchange rates and the capital account liberalization was not as straightforward as in other OECD countries. In general, as it was noted above in Section 3.3. and illustrated in Section 4.1.3. through the case of Germany, the depreciation of the dollar within the scope of the deconstruction of the Bretton Woods system caused the oil crisis that created a current account deficit in oil-importing countries, which in turn had to liberalize their inward capital controls regime to finance this deficit. In the case of France, which, as we saw, had a relaxed approach towards inward capital controls, but a tight policy on capital outflows, the causal links between the demise of the Bretton Woods and the liberalization of its capital account did not work exactly this way.

324 Michael Bordo, THE BRETON WOODS INTERNATIONAL MONETARY SYSTEM: A HISTORICAL OVERVIEW, IN A RETROSPECTIVE ON THE BRETON WOODS SYSTEM: LESSONS FOR INTERNATIONAL MONETARY REFORM (M. BORDO ET AL., EDS.) (1993), 78
The floating exchange regime that followed the Bretton Woods system’s deconstruction posed a new challenge for French policymakers: the depreciation/inflation spiral.

Under the regime of fixed exchange rates devaluation of the franc could be used as a tool in order to adjust France’s balance of payments position. The currency would be devalued and the initial inflation that would emerge from the devaluation could be tamed through austerity measures; austerity measures would reduce the supply of francs, but this reduction in the money supply would not result in the appreciation of the franc in the money market, because the Banque de France would stand ready to intervene abiding by its obligation to keep the parity of the franc to the other currencies.

Nevertheless, under the post-Bretton Woods system of floating exchange rates, a devaluation of the franc and the subsequent implementation of austerity measures to tame inflation would not work. The austerity measures by reducing franc’s supply would put uncontrolled upward pressure to the franc resulting in an appreciation, which would cancel the realization of the balance of payments benefits that were sought within the scope of the earlier devaluation.  

Therefore, the new priority for policymakers was to defend the value of the franc on the exchange by all means; otherwise, no macroeconomic adjustment could be made to the changing international commodities trade environment. This priority also represented France’s EEC commitment to exchange rate stability first on the basis of the ‘Snake’ (1972-1979) and then on the basis of the European Monetary System (1979 onwards).

The tool, to which the French government resorted in 1972 to defend the value of the franc, was the infamous encadrement du crédit. It was a tool specially designed to deal with the inflationary threat that credit expansion posed to the value of the franc. The encadrement essentially meant that financial institutions had to deal with quantitative restrictions regarding their outstanding loans; if the institutions extended more loans than those allowed and thus exceeded the threshold set by the restriction, then the penalty would be an increase in their reserve requirements. In light of these penalties, financial institutions were forced to withdraw a portion of their funds from interest-earning activities. The encadrement served well at the same time the traditional industrial policy of the French State to create ‘national champions’, as credit directed to specific sectors, such as export industries, was exempted from the limitations and banking institutions could lend to firms of this sector without fearing penalties.

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326 Michael Loriaux, States and Markets: French Financial Interventionism in the Seventies, 20 Comparative Politics 175, 179
327 See Marc Chazelas et al., L’expérience française d’encadrement des crédits, Communication au Colloque International de la Banque de France (1977)
328 Loriaux, supra note 326, 180
The high rates of inflation that destabilized the business environment of the 1970s led the French administration to act in accordance with the rising monetarist spirit of the times\(^{329}\); money supply growth targets were set for every year. Apart from the availability of credit, money supply growth also depends on deficit spending and on net foreign earnings\(^{330}\). Therefore, the French monetary authorities in order not to fall short of the money supply growth targets they had set, they were required, apart from fine-tuning the requirements of the encadrement, to exercise fiscal conservatism, so as to control deficit spending and to identify the right mix of capital controls, so as to manage net foreign earnings.

Although the French authorities did a good job in defending the value of the franc, they had less success in fighting inflation. This was attributed to the behavioral ramifications that the ‘overdraft economy’ had on economic agents; demand for credit could not be reduced easily and therefore credit expansion kept inflation rates high. The term ‘overdraft economy’ (économie d’endettement) entered the French vocabulary in 1978 by the writings of two Banque de France economists, who thus helped state officials realize what the real cause of French inflation was and what had to be done to overcome the problem\(^{331}\).

The structures of the overdraft economy were depriving the French state from the ability to implement the rigorous monetary policy that the post-Bretton Woods years required\(^{332}\); the monetary targets were also essential from 1979 onwards, as France was bound by the Exchange Rate Mechanism of the European Monetary System that required the franc market exchange rate to fluctuate vis-à-vis other European currencies within strict bands\(^{333}\). In light of the identification of this problem, the French officials realized that the responsibility for allocating credit should be transferred from (semipublic) lending institutions to the marketplace, where the market mechanisms would level off demand for credit\(^{334}\). This required principally reforms that would lead to the strengthening of capital markets in France, which during the Golden Age stagnated under the state-led credit system.

In the early 1980s, as the pressure on the franc mounted, threatening to compromise France’s commitment to the EMS, the new Socialist government was facing two options: (i) to abolish capital controls and raise the interest rates, so as to attract capital into France thus increasing the demand for the franc; and (ii) to tighten capital controls, so as to lock capital inside France – thus ensuring

\(^{329}\) However, the French Prime Minister, Raymond Barre, denied the monetarist label; see Raymond Barre, L’Économie Française Quatre Ans Après (1976-1980), REVUE DES DEUX MONDES (Sept. 1980) 1

\(^{330}\) LORIAUX, supra note 318, 40

\(^{331}\) Vivien Lévy-Garboua, Le taux de change et la politique monétaire dans une économie d’endettement, ANNALES DE L’INSEE No 32-1978, 3; Gérard Maarek, Monnaie et inflation dans une économie d’endettement, I REVUE D’ÉCONOMIE POLITIQUE 95

\(^{332}\) Loriaux, supra note 326, 187

\(^{333}\) EC Bulletin 6-1978, 1.5.2.

\(^{334}\) Id., at 184
that demand for the franc would not decrease substantially and keep interest rates low. The Keynesian spirit of the Socialist government mandated that the economy receive a monetary stimulus through low interest rates in order to alleviate French residents’ burden in the global recession of the early 1980s due to the enduring second oil shock. Therefore, capital controls were to be tightened in order not to sacrifice the goal of exchange rate stability; foreign exchange positions of French companies and borrowing in France by nonresidents were put under scrutiny. The monetary stimulus increased French demand for imports amidst global recession thus putting France in a severe current account deficit position. The government was forced to devalue the franc and then decided to pursue deflationary monetary and fiscal policies and tighten capital controls even further.

This is when the need to liberalize finance in order to fight the overdraft economy’s inflationary pressures really took momentum. France had to create deep and open capital markets to reduce French firms’ over-reliance on bank loans; at the same time Mitterand’s government saw the UK financial sector growing and feared that the French industry and finance would stay behind, if reforms were not pursued towards the direction of establishing Paris as a leading

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335 Jacques Mélié, Financial Deregulation in France, 34 EUROPEAN ECONOMIC REVIEW 394, 395
336 Goodman & Pauly, supra note 273, 71
337 Id., at 72
Indeed, as we saw above under 4.1.2, the UK was reorienting its economy towards the provision of (financial) services, as a result of both a policy philosophy of Thatcher’s government, but also due to the so-called ‘Dutch disease’, which hits an economy that turns from oil-importing to oil-exporting with the result being the revaluation of its currency and the subsequent loss of competitiveness of its manufacturing sector.339

These two exigencies, one economic and one political, led to the shift of French policy in favor of capital mobility; France phased out from 1986 to 1990 all capital controls abiding at the same time by its obligations that flew from Directive 88/361/EEC, which set out the different types of movement of capital that were to be liberalized by Member-States.340

4.2. The European Monetary Union and the erga omnes free movement of capital

We examined above how the US, the UK, Germany and France were led to the liberalization of their capital accounts after the collapse of Bretton Woods in order to deal with domestic macroeconomic and institutional exigencies. As it is already mentioned, many other OECD countries (e.g. Japan341) were forced to liberalize their capital account—at least with regard to inward capital controls—in order to finance their post-oil crisis current account deficits. But, for European nations at least an additional force behind capital account liberalization was the setting up of the European Monetary Union (‘EMU’), whose foundational pillar was the establishment of the free movement of capital both inside the EU, as well as between the EU and third countries (erga omnes).

4.2.1. The EMU as a response to the collapse of the Bretton Woods system

The exchange rate stability that the Bretton Woods system procured to the European nations made any monetary arrangements at the European Economic Community (‘EEC’) level unnecessary; all EEC currencies were pegged to the dollar and thus indirectly to each other.342 However, as it was mentioned in Sections 4.1.3. and 4.1.4., in 1969 Germany was forced to revalue the mark and France to devalue the franc. These unilateral decisions affecting the relative exchange rates of EEC currencies alarmed European officials, who convened a meeting of the Heads of State or Government of the EEC in The

338 Id., at 74
339 FERDINANDO TARGETTI, NICHOLAS KALDOR: THE ECONOMICS AND POLITICS OF CAPITALISM AS A DYNAMIC SYSTEM (1992), 332
341 BAKKER & CHAPPLE, supra note 319, 5
342 Alberto Giovannini, Richard Cooper, Robert Hall, European Monetary Reform: Progress and Prospects, BROOKINGS PAPERS ON ECONOMIC ACTIVITY, VOL. 1990, NO.2, 217, at 219
Hague in December 1969. Fluctuations of the relative exchange rate of EEC currencies would disrupt the intra-Community trade that the European customs union was then predominantly aspiring to deepen; the EEC would have to shield itself from the monetary disturbances that the foreseeable weakening of the Bretton Woods system would bring.

The Heads of the EEC Member-States agreed that ‘a plan in stages will be worked out during 1970 with a view to the creation of an economic and monetary union’. They agreed so because of ‘the necessity for monetary solidarity, the absence of which was first spectacularly demonstrated by the events of 1969’. A committee was set up led by Pierre Werner, Prime Minister of Luxembourg, to draw a plan for achieving an economic and monetary union between the EEC Member-States.

The committee produced the so-called ‘Werner report’ in October 1970 indicating that a monetary union must occur in three stages:

1. For the first stage, the fluctuation margins between the currencies of the Member-States must be reduced.
2. For the second stage, the freedom of capital movements within the EEC must be achieved, along with the integration of the financial markets, and particularly of the banking systems.
3. For the final stage, exchange rates between the currencies must be irrevocably fixed.

In March 1971 the EC Council of Ministers signed a resolution adopting the Werner report. However, the Werner plan collapsed two months later, as the Bretton Woods system started disintegrating with Germany and The Netherlands floating their currencies in May 1971 and the Nixon shock in August 1971 (see Section 3.1).

Subsequently, as it was also mentioned above (Section 3.1), in April 1972 the EEC initiated the ‘snake in the tunnel’ in response to the Smithsonian agreement. The Smithsonian agreement set bands of ±2.25% for currencies to move relative to their rate against the US dollar. This allowed for a ‘tunnel’, in which EEC currencies could trade. Nevertheless, although the bands on their face seemed minimal, the way the Smithsonian arrangement was structured, implied much larger bands, in which one currency could move against each other. For instance, a certain EEC national currency could start at the bottom of the band, i.e. at -2.25% against the dollar, and it could appreciate in aggregate by 4.5% against the dollar, i.e. to +2.25%; at the same time though another EEC currency could start at the top of the Smithsonian band, i.e. at +2.25% against the dollar, and depreciate by 4.5% reaching the point of -2.25% against the dollar. The bottom line would be that the former EEC currency would have

344 Id.
345 See European Parliament Fact Sheets, 5.1.0. The historical development of monetary integration. Available at http://www.europarl.europa.eu/factsheets/5_1_0_en.htm
appreciated by 9% against the latter currency, which was seen as an excessive differential for the currencies of a customs union, as the EEC was back then. With the Basel agreement in 1972 the six EEC Member-States inserted a ‘snake in the tunnel’ by binding the bilateral margins between their currencies to be limited to 2.25%, implying a maximum change between any two EEC currencies of 4.5%.

The ‘Snake’ proved unsustainable with the franc and the Italian lira leaving and rejoining the arrangement in the aftermath of the 1973 dollar float. The arrangement was replaced in 1979 with the European Monetary System (‘EMS’) and its exchange rate mechanism (‘ERM’), which assigned every participating currency a fixed exchange rate against a notional composite unit of account, the European Currency Unit (‘ECU’).

The 1985 White Paper on the completion of the internal market and the Single European Act of 1986 revived the ultimate objective of a monetary union, which was the irrevocable fixing of the exchange rates. Given the existence of the EMS, the necessary step at this phase was the introduction of rules allowing for the free movement of capital (it will be explained in the next sub-section, 4.2.2., why the liberalization of capital movements is from a macroeconomic perspective necessary for the realization of a monetary union). France, having acknowledged –as it was noted in Section 4.1.4. above- the benefits that financial liberalization would bring to its overdraft economy, played a pivotal role in the new attempt to liberalize capital movements at the Community level and helped overcome the deadlock that previous negotiations on the matter had met.

Indeed, the White Paper elevated the full liberalization of capital movements to an essential part of the process of completing the Internal Market and the Single European Act, being the first major revision of the Treaty of Rome [i.e. the Treaty establishing the EEC, (‘EEC Treaty’)], made considerable progress in preparing the EC institutions for the challenges that the effort for the institutionalization of the free movement of capital at the Community level would give rise to. The EEC Treaty included some provisions with regard to the free movement of capital, but fell short of achieving a complete harmonization in this area. Member-States were nominally bound by the obligation to ‘progressively abolish between themselves all restrictions on the movement of capital’ [Art. 67(1) EEC Treaty], but the actual implementation of this provision required the Council to issue the necessary directives (Art. 69 EEC Treaty). Moreover, as far as the issue of the free movement of capital between the Member States and third countries is concerned, the EEC Treaty required the Commission to propose to the Council appropriate measures, on

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546 DAMIAN CHALMERS ET AL., EUROPEAN UNION LAW: CASES AND MATERIALS (2010), 714
547 European Commission, Completing the Internal Market, White Paper from the Commission to the European Council (Milan, 28-29 June 1985) [COM(85) 310 final]
549 Id., at para. 124ff.
which the Council would issue directives acting unanimously [Art. 70(1) EEC Treaty]. All in all, the provisions on the free movement of capital of the EEC Treaty were not having at this point a direct effect[350], Art. 67ff. of the EEC Treaty could not be invoked in national courts against the state (vertical direct effect) or against private parties (horizontal direct effect)[351].

The Single European Act pushed towards complete harmonization pertaining to the issue of free movement of capital by setting as a deadline for the adoption of the appropriate measures in this field the 31st of December of 1992 (Art. 13 of the Single European Act) and facilitated the decision-making process with regard to the issue of the erga omnes free movement of capital by allowing the Council to issue the relevant directive by acting with a qualified majority rather than unanimously; unanimity would only be required for measures, which would constitute a step back with regard to the liberalization of capital movements [Art. 16(4) of the Single European Act].

In response to the prioritization of the issue of liberalization of capital movements that the Single European Act had set, the Commission embarked on a Community-wide capital account liberalization program that culminated in the issuance of Directive 88/361/EEC, which brought about the complete liberalization of capital movements within the Community. The Directive set July 1990 as the deadline for Member-States to take the measures necessary to comply with its provisions, but allowed countries (Greece, Portugal, Spain and Ireland) that were in a weak balance of payments position to keep capital controls for a little bit longer (until the end of 1992 the latest).

The favorable macroeconomic circumstances of the early 1990s allowed the free movement of capital to move from secondary Community law to the Treaty level and thus the Maastricht Treaty of 1992 unequivocally prohibited the restrictions on the free movement of capital both between Member States and between Member States and third countries in Art. 73b(1) of the EC Treaty (now Art. 63 TFEU); a provision that was quickly recognized to be directly effective[352].

In the meantime the institutionalization of the free movement of capital allowed the vision of a European monetary union to progressively materialize. Two days after the adoption of Directive 88/361/EEC, the Hannover European Council entrusted a committee led by Jacques Delors, Commission President, ‘with the task of studying and proposing concrete stages leading towards this union’[353]. The Delors report was adopted by the Madrid European Council in 1990 and its proposals were thus later largely incorporated in the Maastricht Treaty initiating the path that led to the creation of the European Monetary Union in 1999 and the adoption of the Euro.

[351] Chalmers et al., supra note 346, 267-68
[353] See European Parliament Fact Sheets, 5.1.0, supra note 345
4.2.2. The optimum currency area theory as the intellectual foundation of the EMU-related liberalization of capital movements

In the previous section we noticed that since the days of the Werner report the intra-Community capital account liberalization was seen as a *sine qua non* of the monetary union, whose third and final stage would come to materialize only after all Member States that would participate in this union would have lifted their capital controls. The question to pose at this point is why a monetary union cannot be conceived in the presence of closed financial markets; why a group of countries cannot have a common currency and have capital controls at the same time?

The answer lies in the tenets of the optimum currency area theory that dominated already before the Werner report the thought about the issue of monetary integration.\(^{354}\)

Those who wrote within the scope of this theory on issues related to monetary integration developed theoretical models that compared the balance of payments adjustment process in sets of countries that have flexible exchange rates to the equivalent process in sets of countries that have fixed exchange rate arrangements between them or in regions of the same country that share the same currency. The outcome of these theoretical models was that cross-border capital movements serve an equilibrating role in the balance of payments adjustment effort in those countries that have fixed exchange rate arrangements. As a result, the conviction was developed that a monetary union is doomed to fail without free movement of capital between the participating countries. This belief was reflected in the Werner report and in all subsequent European plans for a monetary union; capital account liberalization was seen as a precondition for the completion of the union.

Indeed, the common denominator among the several optimum currency area theorists was that a flexible exchange rate can correct payments imbalances between two countries, when demand shifts from the product that the one country produces to the product of the other country, but that in a currency area, where there is a commitment to exchange rate stability, the payments imbalances correction requires a high degree of internal factor (=labor & capital) mobility.\(^{355}\) It was thought that absent perfect competition in factor markets, developments from time to time would push the relative cost levels of countries participating in a fixed exchange rate area out of line, exactly because of the fact that a payments imbalance would not be easily restored.\(^{356}\)

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354 The discussion on the optimum currency area theory was initiated in the early 1960s by Robert Mundell with his seminal article *A Theory of Optimum Currency Areas*, 51 AMERICAN ECONOMIC REVIEW 657.


356 Marcus Fleming, *On Exchange Rate Unification*, 81 ECONOMIC JOURNAL 467, 467-68
Wage inflation in a country that participates in a currency area or the shift in demand from the products of this country could, absent the ability of devaluation of the currency, result in a persistent payments deficit, which would result in a higher domestic rate of unemployment and a lower domestic rate of inflation. At the same time those countries participating in the currency area that are found in a surplus position, absent the ability of revaluation of the currency, would be stuck with lower unemployment and higher inflation rates than those desired\textsuperscript{357}. In other words, a unified exchange rate area was seen as having the propensity for relative payments disequilibria\textsuperscript{358} and thus the area’s free trade arrangements would be compromised if they were not complemented by greater labor and capital mobility, which would mitigate these disequilibria\textsuperscript{359}.

Here is how one economist in the late 1950s by using the example of a US state, North Carolina (‘NC’) indicated that capital mobility is crucial for the balance of payments adjustment in a currency area\textsuperscript{360}. Suppose that new investments in NC result in the establishment of new plants that boost the state’s industry production. As a result, NC incomes rise; this leads to a rise in prices and also to a rise in demand deposits. Because of the increase in demand deposits, NC banks build excess reserves and thus are able to buy short-term ‘foreign’ securities, i.e. financial assets issued by out-of-state institutions. Now because of the greater purchasing power that NC residents have, imports to NC rise as well and the payments to the importers lead to a drain of the NC bank reserves. Normally, one would expect after that reduction in NC bank reserves that the state would experience a monetary contraction; however, due to a national (i.e. US-wide) financial market NC banks are able to sell to out-of-state buyers the ‘foreign’ short-term financial assets they had acquired previously. The sale will infuse the NC banks with liquidity and thus they will still be in a position to lend out funds to NC residents; thus, the state won’t experience an undesirable monetary contraction. The ability to sell securities to out-of-state buyers exists because of the free movement of capital within the US and if this possibility was not available to NC banks, then the state would surely experience a monetary contraction and there would be payments pressure. But, the movement of capital into the state can serve an equilibrating role.

While plausible, this early model is not the one that European policymakers had exactly in mind when designing the monetary union. The most influential model, which apart from the virtues also indicates the vices of the free movement of capital in a currency area, is the one presented by Marcus Fleming in his article \textit{On Exchange Rate Unification}\textsuperscript{361}.

\textsuperscript{357} Id., at 468
\textsuperscript{358} Id., at 471
\textsuperscript{359} See James Meade, \textit{The Balance of Payments Problem of a European Free-Trade Area}, 67 \textit{THE ECONOMIC JOURNAL} 267
\textsuperscript{360} James Ingram, \textit{State and Regional Payments Mechanism}, 73 \textit{THE QUARTERLY JOURNAL OF ECONOMICS} 619
\textsuperscript{361} See supra note 356
Fleming assumes two countries belonging to a currency area; country A and country B. Because of a differential in cost-push factors between the two countries, wages and prices are pushed upwards in country A compared to country B. High costs in country A and low costs in country B create a payments disequilibrium between the two countries, as the former moves to a deficit position and the latter to a surplus position. This results in a contraction of demand in A and an expansion of demand in B. Accordingly, there is a decline in savings in country A and a rise in savings in country B. Now, if the level of the incentive to invest in country A does not fall more than the level of savings, then country A will experience a rise in interest rates; at the same time, if the level of the incentive to invest in country B rises less than the level of savings, then interest rates will fall in country B. The interest rate differential between the two countries will result in capital fleeing from B and being in search of investments in A. The capital inflows that the latter will receive will result in higher employment there, while capital outflows from B will lead to a lower rate of inflation in that country. In other words, capital movements inside the currency union will play an equilibrating role functioning as remedies for the economic hiccups that chronic deficits and chronic surpluses bring\textsuperscript{362}. However, what Fleming insisted on was that the free movement of capital in a monetary union will not act spontaneously to the benefit of the participating countries; if the level of the incentive to invest in the deficit country falls more than the level of savings or the level of the incentive to invest in the surplus country rises more than the level of savings, then the interest rates won’t make the deficit country more attractive and the capital movements will accentuate rather than mitigate the disequilibria situation in the currency area\textsuperscript{363}. In other words, the mere allowance of capital movements between the participating countries will not evolve automatically into a surplus recycling mechanism in the absence of certain conditions. Therefore, to allow a monetary union to benefit from the free movement of capital and correct its disequilibria, a certain level of policy co-ordination is needed; not even the PRM that was examined in Section 3.3. above would have functioned effectively without the Fed employing an interest rate policy that attracted funds into the US to finance the country’s trade deficit.

The idea of the co-ordination of the capital flows in a currency union, so that capital moves from the surplus countries to the deficit countries and thus fulfills its equilibrating role, dates back to Keynes and his efforts to establish an orderly surplus recycling mechanism to complement the Bretton Woods arrangements. Without such a co-ordination there can be no ‘symmetrical adjustment’ inside a currency union and sooner or later one participating country will experience the deflationary impact of deficits without being necessarily able

\textsuperscript{362} Fleming, supra note 356, 473

\textsuperscript{363} Id., at 472
to benefit from the capital of the surplus countries of the union. This is because the financial sector tends to regard surplus units as more creditworthy than deficit units, so the profits that the surplus country realized will have the tendency to remain inside the country rather than flow to the deficit country of the union. So, as Keynes noted, ‘since it now seems possible that nature cannot be relied on to do the work’, an authority should exist within any currency area or monetary union to intermediate by drawing profits from the surplus countries and direct them to the deficit countries, so that the monetary union is sustainable.

The Werner report seemed to share the Keynesian misgivings about the disequilibrating role of capital flows and recognized the necessity for the establishment of an authority that would manage intra-union surpluses. The report envisioned that this role could be entrusted to the ‘European Fund for Monetary Cooperation’, which would ‘progressively manage Community reserves’ and would manage intra-European balance-of-payments financing. Unfortunately, though the Fund never actually acquired this status and remained just an account at the BIS used for the clearing of bilateral credits. The need for a real EMU surplus recycling mechanism remains to our days and its absence explains a good deal of the inability of the EU to tackle the ongoing sovereign debt crisis.

4.2.3. Why liberalize capital movements erga omnes?

After the decision was made by European officials in 1969 to gradually develop a monetary union in response to the disintegration of the Bretton Woods system, it was clear on the basis of the optimum currency area theory that sooner or later intra-union capital movements would have to be liberalized. But, the optimum currency area theory fails to explain why the EU actually went one step further and liberalized the movement of capital erga omnes, i.e. vis-à-vis third countries, through Art. 73(b) of the Maastricht Treaty. Therefore, the question that should be posed at this point is why did the EU unilaterally liberalized capital flows vis-à-vis third countries.

365 Id., at 6
366 KEYNES, supra note 211, 394
367 Giovannini et al., supra note 342, 221
369 See Yanis Varoufakis & Stuart Holland, A Modest Proposal for Overcoming the Euro Crisis, Levy Economics Institute, Policy Note, 2011/3, who propose inter alia to transform the European Investment Bank in the authority that will manage the surplus recycling mechanism. Available at: http://www.levyinstitute.org/publications/?docid=1380
The European Monetary Union and the Great Reversal in Shareholdership

The need of the EU nations to develop the EMU, in order to cope with the monetary disturbances that the deconstruction of the Bretton Woods system brought about, required from a macroeconomic point of view the institutionalization of the free movement of capital as one of the four fundamental freedoms, on which the Internal Market would be built. However, the European Court of Justice – as it is shown in Section 4.1.2. of Chapter Four - in interpreting the Treaty rules on the free movement of capital developed over time a case law that may be interpreted as preventing the engagement by firms in shareholder eugenics that would help them craft their shareholder base, so as to include more long-term shareholders. Thus, the institutionalization of the free movement of capital at the EU level as a consequence of the construction of the EMU had had the unanticipated consequence of preventing the adoption of corporate loyalty structures and of preventing long-termist investors to imprint more of their preferences on corporate governance.

The reason is that it was believed, mainly under the influence of the Bundesbank\(^\text{370}\), that the free movement of capital towards third countries would be the best watchdog for the stability of the Euro and would increase the latter’s convertibility, so that it could develop into an international investment, financing, trade and reserve currency along the lines of the model that the deutsche mark had set\(^\text{371}\). In other words, the interconnection between the common currency and free movement of capital towards third countries is what explains and justifies the institutionalization of the free movement of capital by the Maastricht Treaty as the only one of the fundamental freedoms of the Internal Market that extends beyond the latter’s borders\(^\text{372}\).

\(^{370}\) STORY & WALTER, supra note 289, 20
\(^{371}\) Rolf Hasse & Joachim Starbatty, Überlegungen und Empfehlungen zur Währungsunion, in WIRTSCHAFTS- UND WÄHRUNGSUNION AUF DEM PRÜFSTAND (1997), 128-129
\(^{372}\) HINDENLang, supra note 350, fn 72
4.3. The interjurisdictional competition for siphoning capital to national financial markets

The liberalization of capital movements either by unilateral decisions or through intra-state coordination resulted in an interjurisdictional competition to attract capital. States sought to endow their national stock exchanges with the institutions and the facilities that would allow them to develop into global financial centers. All of the jurisdictions, whose capital decontrol efforts were studied above in Section 4.1, promoted specific reforms that would allow international funds to be siphoned to their capital markets. The US moved first towards this direction in the mid-1970s with the UK following a decade later and France responding promptly to the British challenge. Germany’s plan for ‘Finanzplatz Deutschland’ was developed around the mid-1990s and some specific aspects of it will be analyzed later in Chapter Three, as they are of greater significance for corporate law.

The common denominator in these reforms was the reduction in the transaction costs. As it is documented in the theory of financial economics, the cost of transacting affects the frequency and volume of trade; to be more specific, trading volume is inversely related to transaction costs. Therefore, as it would be expected, after these reforms the volume of trading in the stock exchanges increased and this is documented in the higher market turnover of the stock exchange illustrated in Figures 6-8 below. In addition to this, several studies in the field of financial economics have suggested that there is a relationship between short holding periods and lower transaction costs; this suggestion allows us to ascertain that the reduction in the average holding period of stock, on which we elaborate further in Section 7.5, can be partly attributed to the reforms that are presented in sub-sections 4.3.1. – 4.3.3 below.

4.3.1. US’s ‘May Day’ (and the ERISA pension reform)

On the 23rd of January 1975 the Securities and Exchange Commission (‘SEC’) adopted Rule 19b-3 that prohibited any stock exchange from retaining any rule that would require its members to charge fixed commission rates for transactions effected on the exchange or by the use of the exchange facilities. The Rule was effective on the 1st of May 1975 (‘May Day’) with regard to

373 See George Constantinides, Capital Market Equilibrium with Transaction Costs, 94 JOURNAL OF POLITICAL ECONOMY 842
brokerage rates charged by members of the stock exchange to non-members that were extending trading orders and a year later it became effective for rates charged by members to members. In addition to this, the Congress left its imprint on the May Day reform by introducing §6(e) in the 1975 Securities Acts Amendments, which prohibits any exchange from fixing commission rates.

This reform changed the practice of fixed commission rates on the stock exchanges of the US, which originated in the ‘Buttonwood Tree Agreement’ of 1792, by which the stock exchange that would later evolve into the NYSE was founded. Direct price competition in brokerage rates ensued and shortly large trading orders from institutional customers could be negotiated and handled at less than 10¢ per share, whereas before May Day they could cost up to 30¢. As a result, the number of transactions in the US exchanges multiplied, as the cost of securities transfer was reduced and there was a wider margin to profit from short-term fluctuations in the securities price. The annual market turnover, i.e. the percentage of listed shares that were traded during the year, skyrocketed after May Day marking a reversal in the expectations of shareholders, who henceforth sought to profit from capital gains rather than from dividends. Figure 6 below illustrates the dramatic increase in the NYSE market turnover after 1975.

However, while there are good reasons to believe that the May Day reforms were introduced in order to allow the US to benefit from the PRM and finance its current account deficit through Wall Street, there existed structural pathologies in the fixed commissions regime that this radical change sought to cure. As brokers could not compete in the rates field, a non-price competition had emerged that involved inside tips to institutional clients and under-the-table cash bribes. In addition to this, institutions’ desire for lower unit costs led to the rapid development of a third market, where institutional investors could engage in over-the-counter (‘OTC’) transactions and trade large blocks of stock between them without having to meet the high fixed commission rates. This was a development that prompted even the president of the NYSE to advocate for the dropping of fixed commissions in 1970.

The May Day reforms came just on time for the NYSE that would anyway have to accommodate a greater volume of transactions from 1974 onwards because of a separate and independent development in the pension industry. The Employee Retirement Income Security Act of 1974 (‘ERISA’) mandated the funding of pension promises that were made from employers, thus enlarging the pool of pension assets that would be invested in the capital markets.

376 LOUIS LOSS & JOEL SELIGMAN, FUNDAMENTALS OF SECURITIES REGULATION (2004), 798
377 LAWRENCE GOLDBERG & LAWRENCE WHITE, THE DEREGULATION OF THE BANKING AND SECURITIES INDUSTRY (2003), 122
378 Id., at 121
Before ERISA, private pension plans, i.e. employer-provided retirement benefits, were a creature of contract. Employees were facing a series of risks; agency risk, because the plan’s managers could misuse the assets, forfeiture risk, which meant that the employee could lose her pension as a result of a layoff or change of jobs and default risk, i.e. that the plan would be left with no funds to fulfill its obligations towards its beneficiaries. The conviction ‘we need to save now in order to provide for the future’ gathered steam in the early 1970s as it became evident that the US ageing population coupled with the inherent risks that private pension plans were carrying would jeopardize the income of a sizeable group of the population after retirement. ERISA promoted reforms in line with the spirit of the worker-security theory. It sought to minimize the agency risk by introducing fiduciary standards for pension fund managers, the forfeiture risk by introducing minimum (rapid) vesting standards and the default risk by introducing funding standards and a government-run insurance program. Especially as far as the default risk is concerned, companies had to fund their pension promises over 30 years, which meant that they would have to make large contributions to be in line with the new cover ratio that pension plans were required to have. That led to an unprecedented expansion of the pension assets.

381 Id., at 4-5
The Rise of Competition to Manage Pension Assets and the Great Reversal in Shareholdership

The May Day reforms in the US changed the role of Wall Street financial firms from supporting long-term investment activities of corporations—mainly through bond issues—to generating fees through equity trading.

Simultaneously, the ERISA-spurred enlargement of the US pension plans’ pool of funds resulted in the emergence of a competition among investment companies for the management of pension assets. Despite the structural interest of a pension fund in the implementation of a long-term investment policy on the basis of the underlying long-term nature of the pension contract, the fact that one year of severe underperformance on behalf of the investment manager could lead to a serious risk of termination of the mandate resulted in pension fund managers striving for short-term returns. The short-termism of the post-ERISA US pension fund industry, originating from the central conflict between commitment and competition in the finance sector, is also one of the reasons that explain the skyrocketing of the market turnover of the NYSE after 1975 and the concomitant reduction in the average holding period of stock in the NYSE after that year.

4.3.2. UK’s ‘Big Bang’

While it is not entirely clear whether the repeal of the US regime of fixed commission rates was done solely in order to siphon capital to Wall Street, UK’s equivalent to May Day reform, the so-called ‘Big Bang’, seems to have been dictated exclusively by the international competition for attraction of capital that emerged in the post-Bretton Woods world. In the words of the Governor of the Bank of England in 1984 ‘early and substantial change is now unavoidable, if we are not to lose out in the world marketplace’.382

At the time, the London Stock Exchange (‘LSE’) had a regime of fixed commissions, just like in pre-May Day US, while the members of the LSE acted in a single capacity; either as dealers in shares (‘jobbers’) or as stock brokers

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382 Financial Times, March 22, 1984
taking trading orders and advising investors. This regime reduced the competitiveness of the LSE compared to the US stock exchanges, so that especially after the liberalization of exchange controls in the UK in 1979 many British companies preferred to raise capital through the NYSE by issuing American Depository Receipts (‘ADRs’), as investors could buy them in larger volumes because of the much lower average commission rate in the US. The chain of events leading to the ‘Big Bang’ was initiated when the Office of Fair Trading (‘OFT’), UK’s national competition authority, commenced proceedings in 1979 against the LSE for the system of fixed commissions arguing that this constituted an illegal restrictive practice under the Restrictive Trade Practices Act. The LSE was appealing to the government since 1976 to gain exemption from that Act, but its efforts were futile both when there was a Labor government in the UK and after the rise of the Tories in power. The Bank of England backed OFT’s legal action and the case was finally brought before the Restrictive Practices Court in 1983; the OFT filed evidence before the court about the results of May Day in the US in order to make its case against fixed commissions and the dual capacity. In response, the LSE agreed to reform itself rather than allow the court to reach a ruling.

As a result, on the 27th of October of 1986 fixed commissions were abolished and single capacity of LSE’s members was replaced by dual capacity, while new (foreign) members were allowed to enter the LSE. Additionally, the LSE introduced Seaq International, a screen-based quotation system for international equities modelled on the one that Nasdaq in the US was using, in order to facilitate and speed up the realization of the transactions. As a result of the ‘Big Bang’, the LSE experienced an unprecedent boom in the market turnover during the following period, as it is shown below in Figure 7. Thus, the tide towards shareholder short-termism in the UK had already begun:

4.3.3. The French ‘Small Bang’

As it was mentioned in Section 4.1.4. above, the liberalization of finance in France was seen as a necessary move in order to fight the inflationary French overdraft economy. The developments toward this direction were expedited because of the international competition for attraction of funds. Paris had to fend off London’s competition in the financial arena and provide a

383 LINDSAY FELL, AN INTRODUCTION TO FINANCIAL PRODUCTS AND MARKETS (2000), 87
384 HENRY LAURENCE, MONEY RULES: THE NEW POLITICS OF FINANCE IN BRITAIN AND JAPAN (2001), 72
385 MARK THATCHER, INTERNATIONALISATION AND ECONOMIC INSTITUTIONS: COMPARING EUROPEAN EXPERIENCES (2007), 83
386 Id.
387 FELL, supra note 383, 87
response to the ‘Big Bang’. Stock trading of major French companies had been directed to LSE because of liquidity problems on the Paris Bourse.

First of all, the French had to modernize their stock exchange infrastructure. Therefore, in July 1986 a system of continuous computerized quotation was substituted for the open-outcry floor. This helped to manage large volumes of trading and to reduce back-office costs. It was complemented by a system of channeling trading orders automatically, while some years thereafter, in 1990, a new automatic-settlement system was introduced.

The French ‘Small Bang’ —a.k.a. ‘Little Bang’- though came with the Law No 88-70 of 22 January 1988 on securities exchange and the subsequent Decree No 88-254 of 17 March 1988. Banks wanted to move in the securities business to compensate for the losses they were incurring in their traditional activities. However, the regime of stockbrokers’ (agents de change) monopoly in the stock exchange was standing in the way of banks; the brokers were individuals and could only match buy and sell orders, but not deal in securities. However, after the reforms the members of the Bourse could also be approved incorporated securities companies, in which many French and foreign banks acquired equity stakes, and which could also engage in dealing and investment banking activities under some limitations. As these companies were allowed to purchase securities for their own account as dealers, the French stock exchange’s liquidity was greatly improved.

To repeal the regime of fixed commissions just like in the US and the UK the new rules mandated full negotiation of commission rates by 1990. The rise in the market turnover of the Bourse after these reforms was immediate as shown in Figure 8.

In the same spirit, the stamp duty on securities transactions was repealed in December 1994. Naturally, that reform would increase the market turnover in the French stock exchanges, as recent experience from Sweden had shown that the reverse reform, i.e. the introduction of a securities transaction tax, had decreased the rate of turnover in Swedish stock markets. Indeed, as shown in Figure 8 the repeal of the stamp duty marked an increase in the market turnover of the French stock exchange after 1994 verifying the impact that taxation regimes can have on the decision to hold or sell a security (see Section 3.2.2. of Chapter Five).

As a result of these reforms, many previously undercapitalized French firms were enabled to take outside shareholders, many of whom were foreign institutional investors. Major domestic institutional investors that could absorb

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390 STORY & WALTER, supra note 289, 215
391 James Fantô, The Transformation of French Corporate Governance and United States Institutional Investors, 21 BROOKLYN JOURNAL OF INTERNATIONAL LAW 1, 43
392 See Steven Umlauf, Transactions Taxes and Stock Market Behavior: The Swedish Experience, 33 JOURNAL OF FINANCIAL ECONOMICS 227
the growing securities supply in France after the ‘Small Bang’ were not present, particularly due to the absence of French pension funds. The French government realized the necessity for the emergence of pension funds in France, but it failed to pass an ERISA-style reform that would allow for funded pensions. Therefore, part of the securities supply was matched with demand from foreign institutional investors, who became very active particularly in buying stakes in privatized state-owned enterprises (‘SOEs’). This is because from 1986 onwards the French governments embarked on a privatization program that would allow the French state to reduce its fiscal deficit, but also to increase the market capitalization of the Bourse. The state ensured the continuation of control over the privatized SOEs through the retention of golden shares, but a large part of the non-controlling stock was offered to French retail investors and to foreign institutional investors. Foreign institutional investors thus acquired minority stakes in the privatized SOEs and approximately 5% of the shares in any given privatization were offered to US institutions. This might seem like a small stake, but it was large enough to allow US institutions to leave their imprint on French corporate governance. Many of these institutional investors were already familiar with the institutional logics of shareholder value that proliferated during the 1980s hostile takeover frenzy in the US. Thus, as a result of the French privatization program the shareholder value ideology entered as a ‘Trojan horse’ inside the French corporate governance landscape and sew the seed of the Great Reversal in Corporate Governance in France (see more on US institutional ownership of French companies in 6.2.3 below).

The International Competition for the Attraction of Capital and the Great Reversal in Shareholdership

The international competition for the attraction of capital that followed the capital account liberalization movement prompted national authorities to introduce reforms, by which the national stock exchanges would be modernized. The common denominator in these reforms was the reduction in the costs of securities transactions; fixed commissions regimes were repealed and stamp duties were dropped. Because of the fact that trading volume is inversely related to transactions costs, market turnover of the stock exchanges in all the countries that undertook reforms skyrocketed. As equity turnover can be –with some limitations- treated as a proxy for the average holding period of stock, it follows that these reforms also had the indirect effect of reducing the investment time-horizons of shareholders of listed corporations.

393 Fanto, supra note 391, 45
394 Michael Durupt, Les Privatisations En France (1988), 33-34
395 Fanto, supra note 391, 68
Figure 6 – NYSE Equity Turnover, 1951 - 2003
Source: NYSE Euronext Trading Statistics
Figure 7 – UK Equity Turnover, 1965 - 2003
Source: LSE Statistics
Figure 8 – French Equity Turnover, 1969 - 2005
Source: Factbook Euronext Paris 2008
5. The intellectual substructure of the post-Bretton Woods world: Neoclassical Economics

The developments in the post-Bretton Woods world were largely dictated by the new challenges that a world of flexible exchange rates gave rise to; the ‘Nixon shock’ initiated a chain of reactions that covered the whole range of human economic activity and required new approaches to the socioeconomic problems that were usually incorporated in new packages of regulation of domestic or international inspiration.

However, we should not underestimate the support that the economic ideology of the post-Bretton Woods world offered to the radical changes that took place. Political choices that displaced structures that were present since the days of the Great Depression acquired input legitimacy with the blessing of neoclassical economics, which by the late 1970s had already become the economic orthodoxy.

In this part I do not intend to present in detail how exactly neoclassical economics rose to hegemony in the intellectual sphere, nor to analyze all the axioms of neoclassical economics or to explore how each specific post-Bretton Woods policy change in the Western world could be attributed to a certain neoclassical tenet. Others have carried out this task with success in the past and apart from this, such an analysis would divert this thesis from its objective.

My goal in this part is to show how the collapse of the Bretton Woods system actually caused the neoclassical revolution and how the latter affected the thinking about the functioning of capital markets and served as the major force behind the deregulation movement of the 1980s onwards. Thus, this section functions as a prelude to the next one, where I explain the great reversal in the state of the thought about corporate governance during the post-Bretton Woods era, which is to be attributed to the emergence of neoclassical economics as orthodoxy.

5.1. The antidote to the Great Stagflation: Monetarism

Just as the Keynesian revolution found the pre-war economic orthodoxy in a vulnerable state because of the doldrums of the Great Depression, so did the monetarist counter-revolution find Keynesian economics struggling with stagflation in the 1970s. Because of the high rates of inflation that were initially caused in the US by the Vietnam war (see Section 3.1) and Johnson’s ‘Great Society’ (see Section 1.3) and later in the rest of the world because of the oil crisis (see Section 3.2.2), central bankers and politicians alike started embracing the monetarist ideology that put forward as the vehicle of discipline in economic policy-making money stock targets, which were supposed to tame inflation by controlling the money growth supply.

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396 James Tobin, The Monetarist Counter-revolution Today – An Appraisal, 91 THE ECONOMICS JOURNAL 29, 29
397 Id., at 31
C\textsc{orporate} \textsc{law} & \textsc{economic stagnation}

At the policy level, Keynesian reflationary demand management and fiscal activist policies failed to address one of the two evil prongs of the Great Stagflation of the 1970s, i.e. high unemployment, and actually exacerbated the other evil prong, i.e. high inflation. From an academic point of view now, Keynesian economics could not explain by means of the Phillips curve -which showed that the rate of unemployment is inversely related to the rate of change in the wage rate\textsuperscript{398}- the contradictory co-existence of low rates of employment and high rates of inflation during the Great Stagflation\textsuperscript{399}. The economic reality of the 1970s proved that there was no clear-cut relationship between inflation and the level of employment and the monetarists drawing on the belief that ‘money matters’\textsuperscript{400} gained momentum and brought their theories to prominence.

The words of a Keynesian economist in the early 1980s provide a very accurate description of how the inflationary 1970s weakened Keynesian economics giving monetarism a windfall:

‘When the American inflation picked up steam, the misbehavior of the Phillips-curve and the inflation premium in nominal interest rates became obvious for all to see. Monetarists, who had predicted these things by reasoning from the neoclassical anticipated inflation model, made enormous headway within the economics profession and without. Keynesians, who had continued to argue the usefulness of the Phillips-curve and to pooh-pooh the empirical relevance of the anticipated inflation model, lost face and lost influence. It was a debacle. A bad enough debacle so that the profession proclaimed the long controversy a Monetarist victory and, by and large, turned its interest elsewhere.’\textsuperscript{401}

5.2. The rise of New Classical Macroeconomics

While monetarism did a good job in exposing the fallacies of Keynesian analysis with regard to the demon of the 1970s, inflation, it never actually came to play -outside central banks- the organizing theoretical and policy-oriented role that Keynesian economics played during the Golden Age. This can be partly attributable to the fact that because of the oil spikes the relationship between money supply and the level of general prices was not verified empirically in a solid way\textsuperscript{402}, as it could have happened if the 1970s were not characterized by

\textsuperscript{398}William Phillips, \textit{The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957}, 25 \textsc{Economica} 283

\textsuperscript{399}ROBERT \textsc{heilbroner} \& WILLIAM \textsc{milberg}, \textsc{The Crisis of Vision in Modern Economic Thought} (1995), 56

\textsuperscript{400}See Milton Friedman, \textit{The Role of Monetary Policy}, 58 \textsc{American Economic Review} 117


\textsuperscript{402}\textsc{Heilbroner}, \textit{supra} note 399, 70
this unprecedented commodities crisis. But, the real reason why monetarism in its pure form did not rise to durable hegemony as an economic theory, is that the writings of its leading thinker, Milton Friedman, the academic community and the rising conservative political thought found the spore of a much more powerful school of thought, whose intellectual genes are traced back to the classical libertarian theories.

In the 1970s economists were increasingly convinced that monetarism, although right in demonizing inflation, did not present a method that could be used to develop a theoretical model of the economy as a whole. But, as monetarism blended with conservative political ideologies during the 1970s that found in monetarism an ally against the Keynesian state, which in conservatives’ view contributed to the rising burden of taxation on businesses and individuals, a new wave of economic thought emerged that was centered around the free enterprise ideology. In this mixture of thoughts and ideas Milton Friedman’s libertarian views rose to prominence and monetarism’s call for stability in macro-economic policy, gradually transformed into a rejection of any interventionist ‘fine-tuning’ of the economy by the government that could cause instability. In this intellectual climate, another Chicagoan colleague of Friedman, Robert Lucas, seized the opportunity and gave birth with his rational expectations theory to the New Classical Macroeconomics, that lies in the heart of the modern neoclassical orthodoxy.

5.3. The basic tenets of the Neoclassical orthodoxy

As if the lesson from the Great Depression was never learned, the tendency in economics over the last decades, after Lucas formulated his theories, was to embrace once again a variation of Say’s Law of Markets and to remodel the Smithian ‘invisible hand’ by using impressive-looking mathematics.

The first pillar of this wave of economic thought was the theory of rational expectations, which is based on the very notion of *homo economicus*, i.e. that individuals and firms always behave in a way that maximizes their subjective expected utility. Rational expectations theory posits that the forecasts of rational agents in the market do not differ systematically from the actual...
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outcomes; agents, behaving rationally, as utility maximizers, can predict everything that can be predicted and errors do not occur persistently.

The rational expectations assumption led to the second pillar of ‘freshwater’ neoclassical economics: the efficient markets theory. The theory asserts that asset prices at any time reflect accurate understandings of value and incorporate the best relevant information that is available about the intrinsic value of the asset. The efficient markets theory resulted in the development of the idea of rational stock markets; the so-called efficient markets hypothesis (‘EMH’) positing that capital markets are informationally efficient in the sense that securities prices reveal all decision-relevant information in the markets. In its extreme version EMH assumes that securities prices reflect even hidden or inside information, which is relevant to investor decision (‘strong EMH’). The strong version of EMH implies that capital markets are by nature efficient and need only minimal regulation in order to function appropriately. While the strong EMH is not backed by empirical support and thus it is only used as a benchmark in the neoclassical orthodoxy, a semi-strong version of EMH has been more prevalent among economists. Securities prices do reflect information, but only up to the point where the marginal benefits of acting on information (the profits to be made) do not exceed the marginal costs. The semi-strong version of the EMH has led to the popularization of the belief that capital markets need light regulation, since they would largely detect dangers themselves and to a certain extent they would self-regulate their affairs.

The two aforementioned pillars of ‘freshwater’ economics culminated in the real business cycle theory (‘RBCT’), a reincarnation of Say’s Law. For RBCT theorists the only reason why an economic downturn may occur in a capitalist system is the rational reaction of individuals and firms to the lack of productive opportunities that is caused by a technology or other similar shock to

410 Bradley Bateman, Keynes Returns to America, in THE RETURN TO KEYNES (B. Bateman, Ed.) (2010), 20
411 The term ‘freshwater economics’ that is attributed to the neoclassical wave of thought that embraced a more libertarian approach in the latter half of the 20th century was introduced because the main representatives of the movement were academics at US universities, such as the University of Chicago, that are located next to lakes, as opposed to coastal US universities that embraced a different, more Keynesian, approach, which was named ‘saltwater economics’.
412 POSNER, supra note 115, 269; see Sargent, supra note 409
415 James Jordan, On the Efficient Markets Hypothesis, 51 ECONOMETRICA 1325, 1325
416 See Michael Jensen, Some Anomalous Evidence Regarding Market Efficiency, 6 JOURNAL OF FINANCIAL ECONOMICS 95
418 POSNER, supra note 115, 268
the supply side of the economy. In other words recessions cannot be caused by poor investment decisions or by private changes but only by technological changes that reduce productivity on the supply side forcing the demand side to also adjust downwards for a while until productivity boosts again.

5.4. Neoclassical economics and the deregulation movement

Since according to the neoclassical orthodoxy firms and individuals cannot err regarding the price of an asset in an efficient market, a bubble, like the housing one that marked the beginning of the post-2008 crisis, cannot occur. The rational expectations assumption and the EMH do not allow for poor investment decisions capable of creating the accumulation of noise that will cause the price level of an asset to go above its intrinsic value; there is a series of neutralizing mechanisms in the markets that will stop these bubbles from growing into dangerous levels.

Nonetheless, the failure of neoclassical economics to explain bubbles and depressions wouldn’t have been a problem if the neoclassical apparatus weren’t so influential in the regulatory field. Because of the advancement of market fundamentalism by the neoclassicists crucial segments of the market were left under-regulated or worse completely unregulated.

Picking up momentum in the 1970s bankers and fund managers, using the power they acquired by the PRM (see Section 3.3.), were actively lobbying for less regulation. In addition to this, the new globalized market for banking and financial services created an interjurisdictional race-to-the-bottom competition (see Section 4.3), in which governments were seeking to attract capital placement in their country’s financial institutions by relaxing regulation of the financial industry.

The lobbying efforts might not have been so successful and the deregulation movement might not have gone so far, if neoclassical economics weren’t backing the initiatives by assiduously promoting market fundamentalism and anti-paternalism. Neoclassical economics with their advanced mathematical deductivistic modeling - that fails to explain how the real economy and social reality works - provided support for deregulation advocates. The gradual deregulation of the banking industry and the gradual

419 Geetika, Piyali Ghosh & Purba Roy Choudhury, Managerial Economics (2008), 510
420 Bateman, supra note 410, 24
421 Posner, supra note 115, 269
423 Id., 271
424 Mathias Dewatripont, Jean-Charles Rochet & Jean Tirole, Balancing the Banks: Global Lessons from the Financial Crisis (2010), 3; Posner, supra note 11, 269
425 On how the political process allows small groups to obtain favorable regulation, see George Stigler, The Theory of Regulation, 2 Bell Journal of Economics & Management Science 3
426 Dewatripont et al., supra note 424, 2-3
abolishment of compulsory specialization of financial institutions led to consolidation; that meant larger and more powerful financial firms better positioned to capture the regulatory process. This resulted in sets of rules that do not serve the interests of the economy as a whole, but rather those of the regulated institutions.

The incremental deregulation of the financial industry simply encouraged more speculation on securities activities, which was lauded as the engine of economic progress. Regulators—themselves being drawn from a pool of ‘freshwater’ economists—were loath to introduce new rules for the use of inherently non-transparent financial products, such as CDOs, while they did not find it necessary to supervise service providers, such as rating agencies that were inflating the ratings of securities.

Selective credit controls, such as margin requirements, which were the essence of the model of regulation that followed the Great Depression, were replaced by a more libertarian approach that allowed banks to originate all sorts of risky loans, as long as their balance sheet indicated that they abide by certain capital adequacy requirements. This risk-based capital requirements framework became the core of prudential regulation’s spirit over the last three decades or so and was uniformly determined at an international level through the Basel system of regulation. The general underlying rule was that the riskier the asset that a bank held on its balance sheet was the more capital in reserve would be required. However, the accord known as ‘Basel II’, in line with the self-regulation spirit of neoclassical economics, left the banks to measure the risk of their own assets themselves based on their internal mathematical models. In essence, the aforementioned accord made it possible for the banks to assign a lower risk to assets that were in reality riskier, so as to be able to hold less capital in reserve.

At the same time, government’s control of the economy became increasingly constrained as neoclassical economics were praising a monetary policy limited to the mere adjustment of short-term interest rates by central banks. When the markets need a push, interest rates are lowered inducing asset bubbles; when low interest rates create inflation, they are raised inducing the burst of the bubbles.

428 Id., 380
429 Timothy Canova, Financial Market Failure as a Crisis in the Rule of Law: From Market Fundamentalism to a New Keynesian Regulatory Model, 3 HARVARD LAW & POLICY REVIEW 369, 370
430 See Krugman, supra note 16; Posner, supra note 11, 271-272.
431 Dewatripont et al., supra note 424, 41
432 See Dewatripont et al., supra note 424, 2
433 Dewatripont et al., supra note 424, 2
435 To stimulate spending and boost aggregate demand, the central bank has to increase the money supply. For instance, in the US the Fed often increases the money supply in order to offset contractionary shocks to the US economy. As a matter of fact, the Fed lowered the interest rates at the end of 2001 in order to fight the recession that the reduced optimism after the burst of the dotcom bubble, the 9/11 attacks and the corporate accounting scandals (Enron, Worldcom) had created. From a technical/procedural aspect, the decision to lower the interest rates is taken by the Federal Open Market Committee (‘FOMC’), a
5.5. A case study on deregulation: The US banking regulation

The deregulation of the US banking industry that took place progressively since the early 1980s is a hotly debated topic, since many see the roots of the mortgage meltdown that brought us to the post-2008 crisis in this process. Many of the structures that the ‘New Deal’ introduced into the US banking system in the 1930s to prevent the calamity of the Great Depression from happening again were demolished from 1980 onwards. The catalyst forces behind these changes were three: (i) the augmented influence that the banks had acquired on politics due to their role as intermediaries in the new PRM that channeled funds to Wall Street in order to finance the US trade deficit; (ii) the threat that the rising interest rates that the Fed introduced in the 1970s in order to fight inflation were posing to the US housing industry; and (iii) the input legitimacy that neoclassical libertarian economics (‘Reaganomics’) were offering to the reforms.

US commercial banks were allowed again through a series of reforms that span from 1980 through 1999 to become major players in the securities industry, something that was prohibited since the days of the Great Depression. Understanding the neoclassical inspiration of the reforms that were introduced for the US banking sector during the post-Bretton Woods era means understanding the ‘silent’ reason behind the gradual introduction of a new major player in the securities industry, a critical step that helped capital markets grow even more and resulted in them becoming the main generator of the forces that brought about the Great Reversal in Corporate Governance.

5.5.1. Making the asset side of banks’ balance sheet riskier

Banking is both inherently risky and critical to economic stability. Banks can be made safe with regulation, but since safety is not their natural state, if the regulation is removed they have the propensity to get out of control. A bank is an intermediary between borrowers and savers; banks channel funds from savers to borrowers. They collect surplus funds from savers and allocate them to those with a deficit of funds. They do so by using a process that is called ‘maturity transformation’; the transformation of securities with short maturities offered to depositors, into the securities with long maturities that borrowers desire. So, banks borrow short-term and lend out long-term. But, there are certain preconditions in order for this process to be effectuated. The bank should

component of the Fed. To be more precise, the FOMC decides to decrease the target for the federal funds rate, i.e. the short-term interest rate that banks charge one another for loans. In response, the Fed initiates open-market operations at the Domestic Trading Desk at the Federal Reserve Bank of New York by purchasing domestic securities. Banks sell to the Fed, their reserves go up and thus they do not need to borrow so much from one another. As a result, demand for interbank loans falls, so the federal funds rate falls driving all other interest rates down as well. Consequently, the cost of borrowing becomes lower and people are able to secure funds easier and spend them.

436 Xavier Freixas & Jean-Charles Rochet, Microeconomics of Banking (1997), 5
be able to borrow at a lower interest rate, than the one for which it lends. Otherwise it won’t be able to cover its costs. Short-term loans are less risky because the future is not so distant and thus it is more foreseeable; this enables the bank to pay a lower interest rate to depositors and charge a higher one to borrowers and so the bank profits from the spread. But, a higher interest rate to borrowers implies a higher risk undertaken by the bank.

State legislatures in the US had traditionally since the colonial times used usury law, i.e. laws prohibiting excessive interest rates to be imposed on loans that the banks were making to borrowers. During the 1970s the Fed, in order to control the money supply, had introduced very high interest rates, which surpassed the rate permitted by the usury ceilings in many states. This situation did not allow lending institutions to profit from their maturity transformation function. Congress sought a remedy for this issue and thus in 1980 it introduced the Depository Institutions Deregulation and Monetary Control Act (‘DIDMCA’); section 501(a)(1)(A) preempted any state law that limited the interest rate charged on a first lien residential loan. Two years later a similar in effect act, the Garn-St. Germain Depository Institutions Act of 1982, was enacted for the benefit of savings & loans (‘S&Ls’) associations in the US that allowed them to extend adjustable rate mortgage loans. As it will be shown in the next section, that latter law had had a profound effect in the development of the leveraged buy-out market of the 1980s in the US that solidified the ‘shareholder value’ orientation in US corporate governance and thus the Great Reversal in Corporate Governance.

The DIDMCA did not only mark the end of state usury ceilings, but also laid the foundations for the subversion of an important ‘New Deal’ arrangement that was introduced through the Banking Act of 1933 (a.k.a. the Glass-Steagall Act). Regulation Q. The latter prohibited the payment of interest on demand deposits and authorized the Fed to set interest rate ceilings on time and savings deposits paid by commercial banks. Interest on deposits was thought at the time of the Great Depression of creating the tendency of interbank balances, as interior banks were depositing their reserves in banks located at money centers that paid an attractive interest on the deposits. This was affecting the liquidity of the banking system, as it discouraged banks to lend more to their local communities. It was also thought that competition for deposits was pushing banks to acquire riskier assets, in order to obtain the spread that would make them profitable. The DIDMCA arranged the phase-out of interest rates ceilings on time and savings deposits from 1980 to 1986 through the co-ordination of the Depository Institutions Deregulation

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437 BENJAMIN KLEBANER, AMERICAN COMMERCIAL BANKING: A HISTORY (1990), 46
441 LEONARD LYON WATKINS, COMMERCIAL BANKING REFORM IN THE US (1980), 88
442 Alton Gilbert, Requiem for Regulation Q: What it Did and Why it Passed Away, Federal Reserve Bank of St Louis (Feb. 1986) 22, 22
443 Id., at 23
Committee; in 2010 the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010\textsuperscript{444} repealed the prohibition of interest-bearing demand accounts altogether.

The relaxation of the interest rate ceilings was seen as necessary in order to restore the competitiveness of the -influential in the political arena- banking sector that during the 1970s lost many depositors to the mutual fund industry. The latter had found a way round Regulation Q. It introduced money market funds that were investment companies specializing in investing funds in short-term securities in order to provide investors with returns for parking short-term cash with them. Since money market funds were technically mutual funds they were not subject to Regulation Q, but regulated by the Investment Company Act of 1940. Consequently, they were allowed to offer in essence interest-paying checkable accounts, thus being a competitive substitute for banks\textsuperscript{445}.

Again, the chain of reactions that followed the deconstruction of the Bretton Woods at the economy and policy level was the catalyst for the passage of these acts. The high interest rates prevailing in the inflationary 1970s was threatening the viability of the US banking sector that was at the same time left behind by innovations in the finance industry. The Congress had to make the appropriate adjustments in order not to compromise the stability of the banking sector. However, through this legislation the banks were enabled to make riskier loans; in theory, they were enabled to take on more risk than was socially optimal, in the sense that this risk increased the banks’ chances for failure, whose costs would not be borne entirely by banks. But, this eventuality was not seen as alarming under the lens of the neoclassical belief that banking institutions are in the position to manage risk themselves and self-regulate their activities; beliefs that were espoused back then by President Reagan’s Council of Economic Advisers that featured notable representatives of the libertarian way of thinking in economics.

5.5.2. Overturning the divorce between commercial and investment banking

In the ‘New Deal’ period it was ascertained that one of the causes of the Great Depression lied in the structural pathology of the US banking regulation that allowed the same banking organizations to engage both in commercial and in investment banking activities.

During much of the Antebellum period in the US (i.e. the era preceding the American Civil War of 1861-65) banks were limited in core banking activities\textsuperscript{446}. Banks were easily chartered due to the \textit{laissez-faire} ideology that

\textsuperscript{444} Pub.L. 111-203, H.R. 4173
\textsuperscript{445} POSNER, supra note 115, 261
\textsuperscript{446} HOWELL JACKSON & EDWARD SYMONS, REGULATION OF FINANCIAL INSTITUTIONS (1999), 39
prevailed in the post-Jacksonian era, but incorporation was only made at the state level. The Civil War though urged the federal government to obtain financing for the military operations of the Union against the Confederacy of the southern States. To facilitate the obtainment of the financing, it enacted the National Currency Act of 1863 – restated in 1864 as the National Bank Act, which allowed banks to be chartered at the federal level. These national banks would be chartered through the Office of the Comptroller of the Currency ("OCC") of the Treasury Department and they would be required to purchase federal bonds and paper currency that the Treasury issued. Thus, the dual banking system was introduced, as banks could be chartered either at the state or at the federal level, but the government really hoped to induce state-chartered banks to convert to national status, as this would also help the US obtain a national currency, which was impossible back then since state-chartered banks were issuing their own banknotes.

At the same time, the industrial revolution and the large infrastructure that was required for the expansion of the country created demand for large quantities of capital. New specialized firms appeared that were engaged in securities underwriting, especially of internal development and railroad bonds. State-chartered banks exerted pressure and obtained the privilege from state legislatures to become active in the securities industry by acquiring the same powers that trust companies had. They were thus able to underwrite securities as well. National banks were not given the authority to engage in investment banking-like activities, so the regulatory competition between the OCC and the states for charters tilted towards the latter.

But, national banks had to become competitive vis-à-vis the state banks. Thus, they devised ways to circumvent the investment banking restrictions either by owning directly securities affiliates or by having the national bank’s shareholders own the equity of a favored security affiliate. Eventually, the regulatory competition ensuing from the dual banking system prompted Congress to liberalize the national banks’ scope of powers and it did so with the McFadden Act of 1927 that enabled national banks to underwrite those securities that the OCC approved.

The Great Depression era that followed though saw many bank failures. The fact that commercial and investment banking activities were being pursued by the same institutions was seen as having changed banks’ risk profile and as having rendered them more prone to failure. In 1933 the Senate Banking and Currency Committee found the banking industry to be abundant in conflict of

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448 ROBERT LITAN, *WHAT SHOULD BANKS DO?* (1987), 20
449 JACKSON & SYMONS, supra note 446, 36-37; LITAN, supra note 448, 21
450 LITAN, supra note 448, 22
451 Id., at 23
452 Id.
interests because of its wide array of activities. Banks were extending loans to investors, who were purchasing securities in IPOs that the banks’ securities affiliates were underwriting. With the bank loans the IPOs’ securities price could be pumped up and thus enable the affiliate of the bank to get a higher amount in commission fees, which were calculated as a percentage of the gross revenues from the issuance. In response, the Glass-Steagall Act brought the most radical change of the ‘New Deal’: the divorce between commercial and investment banking. It prohibited deposit-taking banks to engage in securities underwriting (sections 16 & 20), securities firms from taking deposits (section 21) and interlocking directorates between banks and securities underwriter firms (section 32).

The divorce of commercial banking from investment banking epitomized the environment, in which US banks were operating during the Golden Age. But, in the 1980s the tenets of the neoclassical thinking that entered US public policy in the form of ‘Reaganomics’, the strengthened position of the banks due to the PRM and the federal government’s reliance on them in order to promote homeownership, which the high interest rates of the 1970s had damaged, all created the environment for the relaxation of the Glass-Steagall’s prohibitions. Commercial banks were vindicating the right to participate as competitors in the securities business and the campaign to topple the Glass-Steagall Act gathered steam in the 1980s.

Banking gained access to the securities industry not through the repeal of the Glass-Steagall Act, but through regulatory relief provided for by the federal agencies. The beginning was made in 1972 with Fed’s Regulation Y, by which bank holding companies were enabled to sponsor closed-end mutual funds. Bank holding companies, regulated by virtue of the Bank Holding Company Act of 1956 by the Fed, were companies that directly (i.e. through 25% or more of the voting stock) or indirectly controlled a bank and they were introduced as entities in order to permit a bank to affiliate with other banks outside its state. In 1982 the OCC authorized Security Pacific National Bank to carry out discount brokerage activities without geographic limit. In 1984 the Federal Deposit Insurance Corporation’s regulation allowed state banks, which were not members of the Federal Reserve System, to establish ‘bona fide’ securities subsidiaries and in 1985 the OCC authorized national banks to broker

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453 LITAN, supra note 448, 27
454 The issue of what actually caused the market crash of 1929 is very much disputed to date. While indeed there have been abuses by the commingling of activities, which the Glass-Steagall act sought to address, many studies have shown that this was not the real cause of the chain of events that led to the Great Depression. Most likely, the underlying cause was the excessive use of bank credit to speculate in the stock market [see Industry Association v. Bd. Of Governors of the Fed Reserve Sys., 839 F. 2d 47, 57 (2d. Cir. 1988)]. The commingling of activities gave a good incentive to banks to pump up stock prices and create a bubble, but if credit channeled to the stock market could be somehow controlled, then the divorce of commercial and investment banking might not have been seen as necessary by the New Dealers. Nevertheless, the latter did address the problem of bank credit that was directed to the stock market, by means of the Securities Exchange Act of 1934, which gave the Fed the power to control bank lending on margin for stocks [15 USC §78(g)(2006)]. In response, the Fed has adopted Regulation T that limits loans on 50% of the stock value.
variable rate annuities.

These regulations were challenged at the courts by the financial services industry, as they were thought of being in breach of the essence of the Glass-Steagall Act. But, under the influence of the neoclassical thinking about the efficiency of the securities markets, into which the banks were now entering, and in light of the de facto importance that the financial markets had acquired as a source of supplement to the falling wages and pensions within the scope of the finance-led model of development of the post-Bretton Woods world (see Section 4.2.3. of the Introduction), the federal courts allowed the commercial banking industry to win a series of judicial battles over the validity of the aforementioned regulations and over interpretative issues, such as what constitutes a ‘security’ or ‘underwriting’ under the Glass-Steagall Act.455

The regulatory developments and the court victories led to a rapid consolidation of the financial services industry. The reforms that were effectuated judicially and administratively were essentially codified with the Gramm-Leach Bliley Act of 1999456 that consummated the repeal of the divorce between commercial and investment banking that the ‘New Deal’ had introduced.457 This Act, apart from expanding the power of ‘well-capitalized’ and ‘well-managed’ banks to engage in financial activities through bank subsidiaries, introduced a new type of entity called the ‘financial holding company’ that would signify the liberalization of the activities, which bank holding companies would be authorized to engage in. The vehicle of consolidation would not be the banks themselves, but the bank holding companies. It’s true that even prior to the Gramm-Leach Bliley Act the powers of bank holding companies were more expansive than pure banking, but they were in principle exempted from securities activities [section (4)(c)(8) of the Bank Holding Act]. However, after the Gramm-Leach Bliley Act a bank holding company, all of whose subsidiary banks were ‘well-capitalized’ and ‘well-managed’ could become a financial holding company and thus engage in the full range of financial activities [section 4(k) of the Bank Holding Act / 12 USC §1843(k)].

455 For an overview of the landmark cases see MELANIE FEIN, SECURITIES ACTIVITIES OF BANKS (2001), par. 1.04ff
457 JACKSON & SYMONS, supra note 446, 45
6. The shift in the institutional logics of corporate governance in the post-Bretton Woods world

In Section 3.1. of the Introduction it was mentioned that this study’s First Hypothesis adheres to the view that the reason behind the reduced rates of capital accumulation in the major Western economies is the orientation of corporate governance towards shareholder value along with the fact that shareholders have been increasingly short-termists. So far, I have presented several developments that have contributed to these two great reversals, such as the growing presence of US institutional investors in insider countries’ corporations’ shareholder structure and the burgeoning of the US capital markets due to the growth of the pension funds industry and due to the entrance of
commercial banks into the securities business. However, none of these developments would actually push towards this direction, if it wasn’t for a shift in the intellectual paradigm of corporate governance that emerged within the neoclassical economics movement in the 1970s.

As a result of the new theoretical developments in the theory of the firm during the 1970s and some stock market events of the 1980s that *de facto* made managers espouse this theory, the institutional logics of corporate governance changed; first, in the US and then in the other Western economies.

The set of values and rules that prevailed in corporate governance during the Golden Age of Capitalism and allowed the Fordist mode of economic growth to flourish (*see* Introduction, 4.2.3.) was epitomized in the model of the ‘Chandlerian’ corporation that carried with it the spirit of long-termism. Thereafter, the shareholder value ideology unrooted the institutions of the Chandlerian corporation and brought about the seed for increasing deference to a group of stakeholders, who were predominantly short-termists.

6.1. The ‘Chandlerian’ corporation of the Golden Age: ‘retain and invest’

The late Alfred Chandler, a prominent historian of the organizational synthesis of capitalism, intended to engage in

‘the development of generalizations and concepts which, although derived from events and actions that occur at a specific time and place, are applicable to other times and places, and are, therefore, valuable as guideposts for or as tools of analysis by […] other scholars.’

To be sure, Chandler used the outcomes from the study of the comparative development of the large industrial corporation in the US, the UK and Germany to identify the dynamics of industrial capitalism. The key to these dynamics were found to be the organizational capabilities of the enterprise, i.e. the collective physical facilities and human skills, as they were organized within the enterprise. These facilities had to be carefully coordinated to ensure that the firm would continue to grow:

‘one of the most critical tasks of top management has always been to maintain these capabilities and to integrate these facilities and skills into a unified organization – so that the whole becomes more than the sum of its parts. Such organizational capabilities in turn have provided the source – the dynamic- for the continuing growth

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460 *INDUSTRIAL AND CORPORATE CHANGE* 317, 317
461 ALFRED CHANDLER, *SCALE AND SCOPE: THE DYNAMICS OF INDUSTRIAL ENTERPRISE* (1990), 594
of the enterprise. They have made possible the earnings that supplied much of the funding of such growth. […] Because of these capabilities the basic goal of the modern industrial enterprise became long-term profits based on long-term growth-growth that increased the productivity, and so the competitive power, that drive the expansion of industrial capitalism.  

Chandler provides the description of a corporation that produces positive dynamics for the capital accumulation in an economy, a key factor for economic growth (see Section 7.2 below). The long-term horizons of the Chandlerian firm allowed it to see profits as the source of investment funds and as the stimulus to further investment. Much like in the Marxian law of capitalist production, where surplus value converts into capital for the purpose of producing more surplus value, the Chandlerian firm contributed through the virtue of patience in the growth of fixed capital formation, which lies in the center of the crucial capital accumulation process. The institutional logics of the Chandlerian firm can be summarized in the phrase ‘retain and invest’.

The Chandlerian firm seems to espouse organicism as well (‘the whole becomes more than the sum of its parts’). This means that the corporation is not a mere reflection of the various desires of the individuals within it. This may seem abstract, but it is crucial for the normative theory of the firm that flows from the Chandlerian model. By espousing organicism the Chandlerian corporation distinguishes itself from the positive and normative view that the neoclassical theory has upon the firm, which is based on methodological individualism. Under the lens of the latter the firm is hiding the true intentions and preferences of the individuals that are its constituents. This precondition legitimizes the normative proposal of the neoclassical theory that the objective of the firm should coincide with the objective of one of its constituents: the shareholders.

Inside the Chandlerian firm there seems to be though one crucial constituent that guarantees that the corporation moves towards the fulfillment of its goal, which is long-term profits based on long-term growth. This constituency is the management; what Chandler called the ‘visible hand’ of managerial coordination that had replaced the Smithian invisible hand of the market.

The managerial revolution was an institutional structure though that emerged largely due to the absence of strong capital markets during the greatest part of the era of industrial capitalism (from the late 19th century until the 1970s). In the US there was consciousness of the existence of that situation in

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401 Id.
402 MARX, supra note 3, Vol. III, 244-45
403 William Lazonick & Mary O’ Sullivan, Maximising Shareholder Value: A New Ideology for Corporate Governance, 29 ECONOMY AND SOCIETY 13
404 LAVOIE, supra note 108, 8
405 See ALFRED CHANDLER, THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS (1977)
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corporate governance through the seminal analysis of Adolf Berle and Gardiner Means, *The Modern Corporation and Private Property* (1932) that identified the separation of ownership and control in the modern corporation; the equity capital was dispersed and the shareholders had traded control for liquidity with the result being a high level of autonomy for the managerial team. The market mechanism was not influential for the US ‘managerial capitalism’ despite the existence of liquid stock markets.\(^{466}\). In Europe the concentration of ownership and the stability of the shareholder base did not give rise to the separation of ownership and control in European corporations, but had the same effect, as they made managers insensible to the capital markets logic. Profits could be retained and reinvested for the future, rather than be distributed to the shareholders.\(^{467}\).

6.2. The shareholder value ideology: ‘downsize and distribute’

6.2.1. The departure from the neoclassical theory of the firm and the ‘nexus of contracts’ approach

For the greatest part of the 20th century most of the academic literature produced in the field of the theory of organizations was influenced by the neoclassical conception of exchange, as it was established by the Walrasian exchange theory.\(^{468}\). Based on this model of exchange, the firm was represented by a production function, which specified the level of output that is obtained when given levels of inputs are chosen.\(^{469}\). The production opportunity set available to the firm was defined in terms of its boundary; what is the maximum obtainable output quantity for different levels of input quantities, given the state of technology and knowledge?\(^{470}\). Within the neoclassical paradigm the firm was viewed as a ‘black box’\(^{471}\), where everything operates smoothly and efficiently, while the internal decision making machinery was not explicated.\(^{472}\). Despite the fact that there had been some critical approaches to this view of the firm,\(^{473}\), the vast majority of economists insisted on portraying the firm as implicitly marginalistic\(^{474}\) and they focused exclusively on how firms make the optimal

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\(^{466}\) Michel Aglietta & Antoine Reberious, CORPORATE GOVERNANCE ADRIFT: A CRITIQUE OF SHAREHOLDER VALUE (2005), 2

\(^{467}\) Id., at 3


\(^{469}\) Andreu Mas-Colell et al., MICROECONOMIC THEORY (1995), ch.5

\(^{470}\) Michael Jensen & William Meckling, Rights and Production Functions: An Application to Labor-Managed Firms and Codetermination, 52 JOURNAL OF BUSINESS 469, 470

\(^{471}\) Jim Tomlinson, Democracy Inside the Black Box? Neoclassical Theories of the Firm and Industrial Democracy, 15 ECONOMY AND SOCIETY 220, 220; see also Kenneth Arrow, Foreword, in FIRMS, MARKETS AND HIERARCHIES (G. Carroll & D. Teece eds.) (1999), vii: ‘Any standard economic theory, not just neoclassical, starts from the existence of firms. Usually, the firm is a point or at any rate a black box’.

\(^{472}\) Mark Blaug, THE METHODOLOGY OF ECONOMICS- OR HOW ECONOMISTS EXPLAIN (1992), 98

\(^{473}\) Robert Hall & Charles Hitch, PRICE THEORY AND BUSINESS BEHAVIOR (1939), 12-45

\(^{474}\) Ronald Edwards, The Pricing of Manufactured Products, 19 ECONOMICA, 298, 298; Milton Friedman, ESSAYS IN POSITIVE ECONOMICS (1953), 21
production choices. In a perfectly competitive market, the members of the firm would have the proper incentives for maximizing their utility levels and they would move towards profit maximization, which implies cost minimization. There was no worry about how the owners of the firm succeed in aligning the objectives of its various members. Incentive considerations that could arise from the assumption that the members of the firm have individually different objectives were not incorporated in the neoclassical model. Even authors who conducted research within the framework of the theory of teams and recognized the decentralized nature of information within a team postulated identical objective functions for the members of a firm. This seemed to be a broader problem of the general equilibrium theory, which did not account for informational asymmetries and the full complexity of strategic interactions between privately informed agents. At the same time, the neoclassical paradigm gave no explanation why particular activities are organized within firms; in other words it did not pin down the boundaries of the firm, thus failing to explain differences in size and shape. With all these questions unanswered the time came to open the ‘black box’ and examine the actual workings of the corporate mechanism inside.

The question that the neoclassical theory of the firm left open with regard to the boundaries of the firm was addressed by Ronald Coase in his much celebrated paper The Nature of the Firm. Coase argued that outside the firm the price mechanism operates in all transactions, while within the firm operations are controlled by the direction of the entrepreneur. The range of transactions over which the price mechanism is replaced by the authority of an entrepreneur-coordinator constitutes the boundaries of the firm. Direction by the entrepreneur can be more efficient than using the price mechanism; in other words organizational costs can be lower than price mechanism costs and whenever this is the case, the firm structure will be preferred instead of contracting in the open market.

While Coase focused on the boundaries of the firm by emphasizing the role of authority in distinguishing it from what happens in the conventional market, another group of authors buckled down to the task of integrating incentive considerations in the theory of the firm.

This new way to study the firm was the result of a general departure from the general equilibrium theory, which did not encompass asymmetric information and the potential for manipulation of private information that economic agents might possess. The starting point of these authors’ analysis was the assumption that some of the inputs of the firm’s production function

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475 See e.g. Jacob Marschak & Roy Radner, Economic Theory of Teams (1972)
476 Bernard Salanié, The Economics of Contracts: A Primer (2005), 1-2
478 16 ECONOMICA, 386
479 Melvin Eisenberg, The Conception that the Corporation Is a Nexus of Contracts, and the Dual Nature of the Firm, 24 JOURNAL OF CORPORATION LAW, 819, 820
480 Bernard Salanie, The Economics of Contracts: A Primer (2005), 2
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may have a quality that is endogenous, rather than exogenous. That means that the value of an input, which will affect the production output, may depend partially on the effort the manager expends, so that a key issue in every firm is how to provide the manager with the proper incentives to improve this quality.

The reference to the matter of incentives linked the whole issue to the so-called ‘incentive theory’, which analyzes the problem of delegating a task to an agent with private information. Thus, the principal-agent model started to play a key role in the discourse about the theory of the firm. This model uses the contract governing the relationship between the principal and the agent as the unit of analysis for the firm, thus departing from the neoclassical paradigm and the ‘authoritarian’ Coasean approach and hence moving towards a contractarian approach.

Under the contractarian approach, transactions within the firm and transactions outside the firm are part of a continuum of contractual relations. Therefore, the firm is not an arena for authority and direction as Coase postulated, but an arena for making contracts; a nexus for a set of contractual relationships. The term ‘contract’, however, in this context does not refer to the legal notion of contract, but has a much broader range of coverage; it refers to an economist’s view of the contract as any reciprocal institutional arrangement between two or more parties that influences and coordinates strategic interactions between the individual decision makers.

6.2.2. The agency theory

The principal-agent model that was put in the center of the contractarian approach of the theory of the firm had to be elaborated further. Jensen and

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481 OLIVER HART, FIRMS, CONTRACTS AND FINANCIAL STRUCTURE, (1995), 18
482 It seems that often the term ‘incentive theory’ is used to refer to the discourse of the same issues, on which contract theory focuses. This could be attributed to the fact that contract theory is a relatively young discipline and thus does not enjoy the privilege of appearing under a consistent name; see Eric Brousseau & Jean-Michel Gachant, The Economics of Contracts and the Renewal of Economics, in THE ECONOMICS OF CONTRACTS: THEORIES AND APPLICATIONS (E. Brousseau & J.-M. Gachant, EDS.) (2002), 3-6
483 Eric Maskin, Roy Radner and Incentive Theory, 6 REVIEW OF ECONOMIC DESIGN 311, 311
484 Kathleen Eisenhardt, Agency Theory: An Assessment and Review, 14 ACADEMY OF MANAGEMENT REVIEW 57, 59; However, Michael Jensen indicates that ‘the individual agent is the elementary unit of analysis’ for agency theory, see Michael Jensen, Organization Theory and Methodology, 53 ACCOUNTING REVIEW 319, 327, but this indeed implicates the study of contracting.
485 For objections of the contractarians against the coe¨rcionist approach of Ronald Coase see Armen Alchian & Harold Demsetz, Production, Information Costs and Economic Organization, 62 AMERICAN ECONOMIC REVIEW 777
486 Oliver Hart, An Economist’s Perspective on the Theory of the Firm, 89 COLUMBIA LAW REVIEW 1757, 1764
487 Jeffrey Gordon, The Mandatory Structure of Corporate Law, 89 COLUMBIA LAW REVIEW 1549, 1549
488 Eisenberg, supra note 479, 823
489 YUWA WELI, COMPARATIVE CORPORATE GOVERNANCE: A CHINESE PERSPECTIVE (2003), 44
490 URS SCHWEIZER, VERTRAGSTHEORIE (1999), 5.
C\[15x724\]ORPORATE L\[18x724\]AW AND THE GR\[24x724\]REAT REVERSAL IN C\[33x724\]ORPORATE G\[43x724\]OVERNANCE

Meckling\[49x695\] identified the separation of ownership and control as the essence of the agency problem of the firm and focused their efforts on developing the most efficient contract governing the shareholder-manager relationship given assumptions about people, organization and information.

Jensen and Meckling drew inspiration for their theory from the diagnosis of the governance structure of the US public corporation, i.e. the positive part of the Berle/Means thesis. Berle and Means had illustrated the divergence of the interests of the management and the shareholders with the following words:

‘[…] the various devices by which management and control have absorbed a portion of the profit-stream have been so intimately related to the business conduct of an enterprise, that the courts seem to have felt not only reluctant to interfere, but positively afraid to do so.’

What Berle and Means meant in the aforementioned quotation is that misappropriations proceed from the very process of management itself; managers may wish to expand their wealth and power at the expense of equity. However, the fundamental divergence of the interests of management and shareholdership, around which the modern agency theory is centered, had been identified by Adam Smith 150 years before Berle and Means:

‘The directors of such companies, however, being the managers rather of other people’s money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. […] Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company.’

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\[492\] Jacques Lenoble, *From an Incentive to a Reflexive Approach to Corporate Governance*, in CORPORATE GOVERNANCE: AN INSTITUTIONALIST APPROACH (2003), 20

\[493\] The issue of incentives to management was touched upon explicitly almost fifty years before Jensen and Meckling developed the agency theory framework by Chester Barnard in his book *THE FUNCTIONS OF THE EXECUTIVE* (1938), 139: ‘An essential element of organizations is the willingness of persons to contribute their individual efforts to the cooperative system… Inadequate incentives mean dissolution or failure to cooperate. Hence, in all sorts of organizations the affording of adequate incentives becomes the most definitely emphasized task in their existence. It is probably in this aspect of executive work that failure is most pronounced’.

\[494\] ADOLF BERLE & GARDINER MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932), 296

\[495\] AGLIETTA & REBERIOUX, supra note 466, 26

\[496\] ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* [1792] (1804), VOL. II, 192
Now, agency theory develops a theory of contracts in cases, which are characterized by asymmetric information and by a divergence of incentives between the parties. The foremost agency problem, with which proponents of this theory are concerned, is the one that governs the relationship between the equity capital suppliers of the firm and the managers; a problem that derives from the separation of management and finance. As in every agency relationship, the contractual relationship between the shareholders (the principals) and the managers (the agents) is characterized by three essential elements:

(i) The objectives of the principal and the agent do not concur, in the sense that they have different utility functions; thus, the maximization of each one’s utility depends on the undertaking of different actions and the making of different decisions.

(ii) The principal and the agent have different attitudes toward risk; they may prefer different actions because of their different risk preferences (the problem of ‘risk sharing’).

(iii) It is difficult or expensive for the principal to verify what the agent is actually doing and if she behaves appropriately. Due to asymmetry of information individual actions cannot be easily observed.

These elements create a problem that is more broadly known as ‘moral hazard’. In essence, the greatest part of the so-called ‘agency costs’ are moral hazard costs. Therefore, when agency theory states that a corporate governance institution should be conducive for reducing agency costs, it means that a governance structure should help alleviate the moral hazard problem that governs the relationship between the shareholders and the managers. Institutions of corporate governance should reduce the range of actions, for which the equity capital suppliers have disutility while the managers have utility, by generating an optimal incentive scheme.

But, why out of all the contracts that constitute the firm, the agency contract between the shareholders and the managers is the most important? Agency theorists are -in their own words- concerned with ‘the survival of organizations in which important decision agents do not bear a substantial

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497 Shleifer & Vishny, supra note 89, 740.
499 Bengt Homstrom, Moral Hazard and Observability, 10 BELL JOURNAL OF ECONOMICS 74, 74
500 Milton Harris & Artur Raviv, Optimal Incentive Contracts with Imperfect Information, 20 JOURNAL OF ECONOMIC THEORY 231, 231. The term ‘moral hazard’ is interchangeably used in theory with the term ‘hidden action’, which conveys the meaning in a more straightforward way to the layperson; see e.g. MAS-COLELL, WHINSTON & GREEN, supra note 505, 477
501 Michael Jensen & Clifford Smith, Stockholder, Manager and Creditor Interests: Applications of Agency Theory, in Recent Advances in Corporate Finance (E. Altman & M. Subrahmanyam, eds.) (1985), 95; Ross, supra note 498
share of the wealth effects of their decisions.\textsuperscript{502} Therefore, in their view what needs to be identified is the corporate constituency, towards the interests of which the corporate contract should direct decisions, so that it can add to the survival value of the corporation.\textsuperscript{503} This corporate constituency is the one that carries the residual risk, i.e. the risk of the difference between stochastic inflows of resources and promised payments to agents; in other words, the one that contracts for the rights to net cash flows.\textsuperscript{504} In the corporate form this constituency is the shareholder. The shareholder is the one, in whose interest it is to produce outputs at lower cost, because that would increase the net cash flows; but lower costs contribute to the survival of the organization as well.

For the above reasons the agency relationship, which is at the center of the analysis of the firm, is the one between the manager and the shareholders. The combination of the agency perspective and the function of the residual risk-taking within an organization results in the agency theory; a construct that is not neutral from a normative point of view, as it carries within it the idea that the optimal corporate contract is the one that takes steps to maximize shareholder value. In other words, from a normative viewpoint the agency theory advocates that the corporate governance mechanisms that will contribute to the alignment of the interests of the manager and the shareholders will improve the efficiency of the corporation.

One of these governance mechanisms that reduces agency costs and indirectly helps to align management’s incentives with those of the shareholders is the distribution of dividends to the latter. Higher dividends reduce the amount of free cash flows available for investment spending with the result being the need of the firm to seek further external financing, in order to realize its plans. Greater external finance, be it in the form of equity or debt, will enhance the monitoring of the management and thus reduce agency costs;\textsuperscript{505} the raising of more equity capital will increase the attention that managers will pay to the share price and thus they will be incentivized to do what it takes to pump this price up, while debt has exceptional disciplining effects on management. Given that free cash flows are traditionally considered as a source of agency costs, it follows that the distribution of dividends and the concomitant borrowing that forces managers to make fixed payments to creditors can contribute to the reduction of agency costs and hence to the maximization of the firm’s value.\textsuperscript{506} Removing free cash from the corporation means removing an opportunity for the insiders to inflate their private benefits. This is why the agency theory and its

\begin{footnotesize}
\begin{enumerate}
\item[502] Eugene Fama & Michael Jensen, Separation of Ownership and Control, 26 JOURNAL OF LAW AND ECONOMICS 301, 301
\item[503] Id., at 302
\item[504] See Michael Jensen, Agency Costs of Free Cash Flow, Corporate Finance and Takeovers, 76 AMERICAN ECONOMIC REVIEW 323; Frank Easterbrook, Two Agency-Cost Explanations of Dividends, 74 AMERICAN ECONOMIC REVIEW 650; Michael Rozeff, Growth, Beta and Agency Costs as Determinants of Dividends Payout Ratios, 5 JOURNAL OF FINANCIAL RESEARCH 249
\item[505] Michael Jensen, Eclipse of the Public Corporation, 67 HARVARD BUSINESS REVIEW 61, 61
\end{enumerate}
\end{footnotesize}
shareholder value approach favor the proliferation of the institutional logics of ‘downsize and distribute’ in modern corporate governance.

6.2.3. The shareholder value’s handmaidens: US manufacturing sector’s reduced competitiveness, the antitrust law-triggered LBO boom of the 1980s, US institutional investors in Europe and executive compensation

The fact that the agency theory with its preference for the maximization of shareholder value rose to prominence in the intellectual sphere does not mean that it automatically penetrated the real world of corporations and instantly became the ‘holy grail’ of corporate governance in action. There were many chapters in the story between the appearance of the shareholder value approach in some academic papers in the 1970s and the pronouncement by the OECD Principles of Corporate Governance in 1999 that corporations should be run in the interests of shareholders.

The bottom line is that just like Monetarism and New Classical Macroeconomics found Keynesianism vulnerable due to some factual circumstances and became the dominant economic policy approaches (see Section 5.1), so did agency theory took momentum in the late 1970s and gradually managed to displace the Chandlerian institutional logics of ‘retain and invest’, as a result of a series of events that were unfavorable for the latter.

During the 1960s US public corporations had grown excessively and moved beyond their core competencies within the framework of a conglomerate merger movement; a conglomerate merger is a merger between firms operating in unrelated industries. This movement was fueled by a booming economy and by the slowdown of defense expenditures that urged many large firms in the aerospace and natural resources industry that were dependent on the procurement contracts of the Pentagon to seek new partners. But, what actually pushed firms to engage in a diversification strategy by effectuating conglomerate mergers was a heightened antitrust atmosphere during the 1960s that grew out of the Celler-Kefauver Act of 1950, which strengthened the antimerger provisions of the Clayton Act of 1914. According to the Clayton Act the acquisition by one firm of the equity of another firm of the same industry could be enjoined by the Federal Trade Commission (‘FTC’) if the resulting business combination would have an anticompetitive effect in that industry; but, corporations were off the hook if the business combination was effectuated not as a share acquisition, but as an asset acquisition. The Celler-Kefauver Act closed that last loophole and expansionary Chandlerian-minded managers were left with no other option, but to form a conglomerate with a firm from another industry that would obviously not have an anticompetitive effect. The dominant antitrust policy paradigm of the 1950s and the 1960s in

507 BIORN ESPEN ECKBO, HANDBOOK OF CORPORATE Finance: EMPIRICAL CORPORATE Finance (2008), 298
508 PATRICK GAUGHAN, MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURINGS (2007), 41
509 JOSEPH WILSON, GLOBALIZATION AND THE LIMITS OF NATIONAL MERGER CONTROL LAWS (2003), 89
the US was the so-called ‘Structure-Conduct-Performance’ (‘SCP’) that had put forward a theory, which predicted that the more closely the market in question approaches the state of monopoly the worse its performance in terms of economic welfare gets510. The demon of antitrust policy were high levels of concentration in a specific industry and under the influence of the SCP paradigm the US Supreme Court had developed legal standards for scrutinizing mergers based on the concentration of the industry and the market shares of the merging firms511. Therefore, the only way to satisfy the Chandlerian tendency for expansion was to look for partners beyond the firm’s industry.

However, the macroeconomic environment of the 1970s was not favorable to the large Chandlerian conglomerate, to which the heightened antitrust spirit of the 1950s and 1960s had given rise to. The Great Stagflation left large firms with undervalued assets, low market capitalization and low profitability. Many of the young conglomerates were not performing well512. At the same time the US mass production industries of automobiles, consumer electronics and machinery were being challenged by the Japanese industry513. As a result, there was a growing disbelief in the ability of the ‘visible hand’ of managerial control to allocate resources in the economy efficiently; this disbelief was further reinforced by the rise to dominance during the same period of neoclassical economics that carried with them the conviction that the market – the ‘invisible hand’ - is superior to management in the efficient allocation of resources514.

While the institutional logics of ‘retain and invest’ were being weakened, the agency theory with its preference for the shareholder-friendly ‘downsize and distribute’ model had already made its appearance. But, its proliferation in the real corporate world had to wait for a second large takeover movement during the 1980s.

The second large takeover movement would be triggered again by a change in the antitrust rules. The Chicagoan branch of neoclassical economics would come to play a catalyst role in this respect. The Chicago School of antitrust analysis was developing a new competing to the SCP competition policy paradigm. The connection between industry concentration and anticompetitive effects was relaxed by Chicagoans; through a typical cost-benefit analysis they managed to show that anticompetitive behavior in a concentrated industry is simply not in the oligopolists’ interest515. In the words of a Chicagoan representative: ‘the desire to make a buck leads people to undermine monopolistic practices’ 516. This phrase epitomizes the hallmark of

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510 GIORGO MONTI, EC COMPETITION LAW (2008), 58  
513 See William Lazonick, Organizational Learning and International Competition, in GLOBALIZATION, GROWTH, AND GOVERNANCE: CREATING AN INNOVATIVE ECONOMY (J. MICHE & J. SMITH, EDs.) (1998)  
514 Lazonick & O’ Sullivan, supra note 463, 15  
515 See George Stigler, A Theory of Oligopoly, 72 JOURNAL OF POLITICAL ECONOMY 44  
516 Frank Easterbrook, Workable Antitrust Policy, 84 MICHIGAN LAW REVIEW 1696, 1701
the Chicago approach to political economy; the market can cure itself and needs no legal intervention from the state. Under the Chicago approach to antitrust law and policy, the legal standard shifts from an inquiry into market power to an effects-based approach about whether the practice in question is efficient. The new US Assistant Attorney General in charge of the Antitrust Division of the Department of Justice (’DoJ’) in Reagan’s administration espoused the Chicago approach and thus under his guidance the DoJ Merger Guidelines of 1968 were rewritten in 1981 reflecting the new paradigm\(^{517}\). According to the new Guidelines almost all mergers except those that led to a concentration ratio of 80% in the same product line would be approved by the FTC\(^{518}\); mergers were thus facilitated. In addition to this, Reaganite corporate income tax cuts, also left capital free for takeover finance; a new takeover movement emerged.

But, this takeover movement would have some distinguishing characteristics that were formed due to the combination of an important financial innovation and the deregulation of the pension fund and banking industry.

Michael Milken, an employee of the investment bank of Drexel, Burnham and Lambert started in the late 1970s a high-yield bond trading department, which would enable the investment bank to underwrite ‘junk’ investment-grade bonds (‘junk bonds’). A 1978 ERISA amendment and the enactment of the Garn-St. Germain Act of 1982 (see Section 5.5.1) created a demand for junk bonds, as pension funds and S&L associations were now allowed by law to invest in them. Soon a highly liquid junk bond market developed centered around Drexel, which fed the 1980s leveraged-buyouts (‘LBOs’) boom. Potential acquirors would raise acquisition debt by issuing junk bonds and secure their creditors’ claims against the assets and the future cash flows of the target corporation; with the proceeds from the junk bond issuance they would launch a public takeover bid for the target’s shares.

Under the ‘buy it, flip it, sell it’ strategy of the private equity funds that were orchestrating the LBOs, the target’s stock price had to be pumped up after the acquisition, so that the acquiror could exit her investment later at a profit. This made the stock price the ‘holy grail’ for a target’s post-LBO managers and fueled in practice the trend towards maximizing shareholder value through infamous practices, such as asset stripping and layoffs that in aggregate had had the effect of reducing business capital accumulation.

On the other hand, target’s pre-LBO management could only fend off the attack by a corporate raider by focusing on the share price; only if the latter was high enough could the acquisition be made prohibitively expensive for the potential acquiror. Thus, even in that case maximizing shareholder value became the key to keeping the company intact. Therefore, those involved in the market for corporate control of the 1980s became out of necessity acquainted with the normative tenet of the agency theory, the maximization of the shareholder value.

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517 See Thomas Kauper, The 1982 Horizontal Merger Guidelines: of Collusion, Efficiency and Failure, 71 CALIFORNIA LAW REVIEW 497
518 FLIGSTEIN, supra note 512, 156
The acquaintance of the US corporate community with the shareholder value approach to corporate governance during the 1980s takeover movement was later exported to Europe. This peculiar export was effected firstly as a result of the cross-listing of European corporations in the NYSE and the issuance of ARDs to US institutional investors (for the case of the UK see 4.3.2) and due to the fact that European countries were looking to expand their financial markets from the late 1980s onwards by offering equity stakes in corporations to US institutional investors, many of whom took an activist stance against the stakeholderist practice of European boards (see for the case of France in 4.3.3).

For instance in 2001 the California Public Employees Retirement System (‘CalPERS’), a US pension fund that is one of the largest shareholders in the world, allocated $1.7bn of its investments specifically to pursue activist corporate governance strategies in European and Japanese corporations519. Even earlier than that, in 1997, CalPERS was issuing guidelines, as to how it would vote in French corporations’ annual general meetings520, while the same year Institutional Shareholder Services (‘ISS’), the champion US proxy advisor at the time, opened a branch in Paris to make inroads into the European corporate governance521. Especially, in France, where large domestic pension funds were not present at the time when many SOEs were being privatized, minority equity stakes in many French corporations were bought by US institutional investors, whose shareholdings in French companies increased from 15% to 25% between 1990 and 1994522.

However, the main driving force behind the penetration of the shareholder value ideology in boardrooms was the executive compensation programs that were heavily based on stock options. This has been and still is a very popular topic in corporate governance literature with an abundance of exhaustive studies on how executive compensation managed to align the interests of the managers and the shareholders in both outsider and insider countries and bring about the convergence in corporate governance systems. I will, thus, restrain myself from analyzing the issue here, but I revert to it under Chapter Three (see Section 2.5. of Chapter Three), where I try to prove that corporate law reforms that promoted the Great Reversal in Corporate Governance.

520 French Corporate Governance Issues Far From Being Resolved, AFX NEWS, July 7, 1997
521 ISS Forms Link with French Firm, PENSIONS & INVESTMENTS (Feb. 6, 1995), at 18
522 Joel Chernoff, French Investor’s Institutions Boost Equity, PENSIONS & INVESTMENTS, August 4, 1997, at 16
The Takeover Movement of the 1980s and the Great Reversal in Corporate Governance

The shareholder value approach, whose efficiency was praised by the agency theory, proliferated in US boardrooms during the 1980s due to the hostile takeover movement that was nurtured by the spontaneous creation of a market for junk bonds and the shift in the institutional logics of US antitrust law and merger control, as a result of the rise to dominance of the neoclassical Chicagoan paradigm in competition policy. Pumping up the share price by means of the adoption of shareholder value-enhancing strategies was the only way for management to defend against the threat of a hostile tender offer, while the profitable secondary sale of a firm by an acquirer also required the pumping up of the share price through similar measures. US institutional investors became acquainted with the shareholder value culture of the 1980s and exported it to Europe, which from the late 1980s sought to attract US investors to European corporations within the scope of the national financial liberalization and privatization programs.
The Great Reversal in Corporate Governance
From “retain and invest” (aka Chandlerian firm) to “downsize and distribute” (aka shareholder value)

- Breakdown of the Bretton Woods (due to “dollar glut” caused by 5’s international reserve status, “Marshall Plan”, US military spending)
- Oil crisis of the 1970s (OPEC causes rise in price of oil to reflect dollar’s depreciation & Yom Kippur War)
- Inflation (1970s)
- Current account deficits (1970s)
- Capital account liberalizations & financialization of European economies (late 1970s – late 1980s)
- Global surplus recycling mechanism: Banks underwrite government securities to finance trade deficits. Banks stronger in lobbying
- Under Chicago approach to antitrust, US merger guidelines change, merger control relaxed
- LBO boom of the 1980s; the threat of takeover makes managers focus on shareholder value
- Cross-listings become possible: Firms from CMEs list securities in LMEs’ stock exchanges
- US institutional investors bringing the shareholder culture of the 1980s LBO boom invest in European firms
- Agency theory rises as an alternative
- US industrial conglomerates in crisis; the Chandlerian model questioned
- International trade deepens due to GATT rounds (1945–1990s): US imports more; US firms become less competitive

- “Retain and Invest”
  The Chandlerian firm
  1950s–1990s

- Creation of European Monetary Union (Early 1970s – Early 1990s)
- Free Movement of Capital (secondary EC law – Maastricht Treaty) Late 1980s – Early 1990s
- ECJ interprets stakeholder structuring as violating the free movement of capital (Mid-1990s onwards)
- Monetarism rises (1970s)
- Emergence of New Classical Macroeconomics (late 1970s)
- Advent of Deregulation spirit
- New Deal overturned: US Banks get the securities business (1980s–1990s)
- Equity markets grow in size and importance for corporate governance
- ERISA, 1974: birth of pension industry
The Great Reversal in Shareholdership
From long-termism to short-termism
7. Backing the First Hypothesis: Are there indications that the post-Bretton Woods economic stagnation is attributable to the Great Reversal in Corporate Governance and the Great Reversal in Shareholdership?

In this final section of Chapter One indications and empirical data are provided that support this study’s First Hypothesis, i.e. that the Great Reversal in Corporate Governance and the Great Reversal in Shareholdership, which occurred due to the array of institutions presented in Figures 9 and 10 and due to developments in corporate law that are discussed within the scope of the Second and Third Hypotheses in Chapters Three and Four respectively, have caused the high equity payout ratios and the concomitant low retention ratios in corporations, which are trends responsible for the slowdown in the growth rates of capital accumulation that is in turn responsible for the slowdown in economic growth in the post-Bretton Woods era. The discussion as to the plausibility of the First Hypothesis will be completed in Chapter Two with the presentation of the Post-Keynesian theory of the firm that models that influence of shareholder value orientation and short-termism on capital accumulation dynamics.

The Causality Chain of the First Hypothesis

7.1. The post-Bretton Woods economic stagnation

After the exceptionally high rates of growth of the Golden Age the major Western economies seem to have entered a stagnation mode from 1973 onwards, as it becomes evident by the average annual GDP growth rates of 17 OECD countries in the post-Bretton Woods era (Figure 11). For the first 25 years following the breakdown of the system of fixed exchange rates, during which most of the changes in the international political economy discussed in Sections 3-6 took place, no developed economy apart from Norway had an average annual growth rate above 3%, while the first decade of the 21st century
marks an increase in the average GDP growth rate, which is, however, nowhere close to the growth rates of the Golden Age.

There are several plausible explanations of why the major Western economies have experienced this slowdown in their rates of growth from the collapse of the Bretton Woods system and onwards. One could dedicate an entire book to present the interpretations that economists have given to the phenomenon (for a summary see Section 7.7). In light of the limitations that this study has set for itself in the Introduction, what I am going to do in the following sub-sections is focus on a widely-accepted determinant of economic growth, capital accumulation, and then attempt to unravel the skein of how the Great Reversal in Corporate Governance and the Great Reversal in Shareholdership may have affected the trends in the accumulation of capital. The discussion on the causality chain between the two great reversals and the rates of economic growth will be completed in Chapter Two, but this final section of Chapter One provides some preliminary explanation as to how the reorientation of corporate governance towards shareholder value and the simultaneous short-termism of the shareholders causally relate to the slowdown of the GDP growth.

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Figure 11 – Annual average compound GDP growth rates (in %) in 17 OECD countries, 1870-2008

Source: For the years up to 1998: Angus Maddison, The World Economy, Vol. 2: Historical Statistics (OECD 2006); for the years 1999 to 2008: OECD National Accounts

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7.2. The post-Bretton Woods slowdown in capital accumulation

The GDP depicts the market value of all final goods and services produced within a country in a given period of time. Its four basic components are consumption, investment, government purchases and net exports. A great deal of the production process and the investment in capitalist economies takes place within firms, so that the growth of business GDP is decisive for the growth of the overall real GDP of an economy. It follows that the business GDP grows if the productivity of business grows. Productivity is the quantity of goods and services produced from each unit of labor input\(^ {523} \). It follows that productivity’s two major determinants is the human capital factor and the physical capital factor. The physical capital, i.e. the stock of equipment and structures that are used to produce goods and services\(^ {524} \), though is a \textit{suis generis} input in the production process, in the sense that it is a produced factor of production; physical capital, which at a given moment in time becomes an input of production, was at some point in the past an output from the production process\(^ {525} \). Consequently, one way to raise future productivity (and further the GDP) is by investing more current resources out of savings or profits in the production of physical capital that will later become a valuable input thus ensuring productivity also in the years to come. This process of investment in real capital goods and tangible means of production is called (physical) capital accumulation.

The oversimplified analysis above already indicates how important physical capital accumulation is for the growth of a GDP of an economy. However, a brief recap of the main traditions within the literature of economic growth will show that indeed (physical) capital accumulation, as the result of deliberate investment decisions, is widely-accepted as a robust source of long-run economic growth regardless of the philosophical presuppositions of the various economic schools of thought.

Classical economists, although they failed to produce a theory appropriate to industrial capitalism\(^ {526} \), recognized that the accumulation and productive investment of a part of the social product is the main source of economic growth and that in the capitalist economy this process takes the form of the reinvestment of profits\(^ {527} \).

Karl Marx saw accumulation of capital as the main driving force of capitalist development; through the process of converting surplus value into capital, the capitalist economy has in Marxian theory the inner logic of an inherently expansionary system\(^ {528} \).

525 Mankiw, supra note 523, at 556
527 Donald Harris, \textit{Capital Accumulation and Income Distribution} (1978), 4
528 Id., at 14-15
The neoclassical model of growth, centered on Solow’s production function of capital and labor\(^{529}\), emphasizes as well the role of physical capital accumulation for long-run economic development\(^{530}\).

The endogenous growth theory, which developed as a response to some deficiencies of the neoclassical model of growth, does not underestimate the physical capital accumulation’s significance, but expands the definition of ‘capital’ to include human capital as well and emphasizes the role of investment in skills and knowledge\(^{531}\). Physical capital accumulation is seen as introducing positive externalities in the framework of the endogenous growth theory, because the creation of economy-wide knowledge is viewed as a by-product of the investment activity of individual firms (‘learning by investing’)\(^{532}\).

Since (physical) capital accumulation is –without serious doubts- such an important co-determinant of economic growth, then it is plausible to suggest that the post-Bretton Woods stagnation might have been caused by a slowdown in the accumulation rate, i.e. in the growth rate of the gross business capital stock. Therefore, it is appropriate to ask ourselves at this point whether there is indeed evidence that the growth rate of the gross fixed (business) capital formation has been slowing down from 1973 onwards. Figures 12 and 13 provide a positive answer to this question for the case of four of the world’s strongest economies (France, UK, US, The Netherlands).

In the United States, France and The Netherlands we notice a similar trend; while the rate of growth of private non-residential (a.k.a. ‘business’) capital stock is relatively stable during the Golden Age and reaches a high point around the years 1972-1974 (i.e. when the Bretton Woods system of fixed exchange rates definitively collapses), it has high fluctuations and persistently decreases after that point never reaching again the all-times-high of the Golden Age. The UK is the only economy that has experienced a high enough growth rate of its capital base at certain years during the post-Bretton Woods era, but shows signs of a slowdown from the late 1990s onwards. However, the linear regression trend line in Figure 13, shows that even for the case of the UK the long-term trend in capital accumulation is declining.

The Netherlands have been included in the calculations of the growth rate of accumulation of business capital, in order to show how developments concerning capital accumulation have played out in a country, whose businesses function along the lines of the Rhenish model of corporate governance, since the collection of reliable relevant data for the German business capital accumulation is difficult due to the pre-1990 division of Germany. However, data were collected regarding the investment rate in Germany for the period 1970 - 2010

\(^{529}\) See Robert Solow, A Contribution to the Theory of Economic Growth, 70 QUARTERLY JOURNAL OF ECONOMICS 65

\(^{530}\) Mankiw, supra note 524, 275-80

\(^{531}\) See Robert Lucas, On the Mechanics of Economic Development, 22 JOURNAL OF MONETARY ECONOMICS 3; Paul Romer, Increasing Returns and Long-run Growth, 94 JOURNAL OF POLITICAL ECONOMY 1002; Paul Romer, Endogenous Technological Change, 89 JOURNAL OF POLITICAL ECONOMY 571

\(^{532}\) See Romer, supra note 531
CORPORATE LAW AND THE GREAT REVERSAL IN CORPORATE GOVERNANCE

(Figure 14); the investment rate, which is calculated as gross fixed capital formation to GDP, is a widely used proxy for the rate of the capital accumulation in an economy\(^{533}\). Therefore, in light of the clearly falling investment rate in Germany, it is safe to conclude that the rate of physical capital accumulation in Europe’s largest economy is also in constant decline during the post-Bretton Woods era, which might be a plausible explanation for the slowdown in economic growth during the same period.

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Growth rate of private non-residential capital stock (in %)
1960 - 2006

- France
- United Kingdom
- United States
- The Netherlands
Germany's Capital Accumulation, 1970 - 2010

Source: OECD National Accounts (Investment rate = Gross Fixed Capital Formation to GDP); Author's Calculations

Corporation Law & Economic Stagnation
7.3. The reducing retention ratio of corporations in the post-Bretton Woods era

Within the scope of the recap of the theories of economic growth in the previous sub-section it became evident that in the process of physical capital accumulation the mechanism of reinvestment of profits on behalf of corporations is central. Therefore, in light of what was discussed under Section 6 regarding the shift in the institutional logics of corporate governance from a ‘retain and invest’ to a ‘downsize and distribute’ model, one could logically assume that corporations in the post-Bretton Woods era running on the latter model were reinvesting profits at a smaller rate than during the Golden Age and this is why the slowdown in capital accumulation has occurred. The question to be posed here is whether there is evidence that corporations have indeed behaved this way.

What needs to be done in this respect, is to check the historical trend in firms’ retention ratio, in other words to verify whether firms statistically tend to keep a lesser percentage of their net income inside them as time goes by. Figure 15 identifies that this hypothesis hold true at least for US NFCs. From the late 1970s onwards it is obvious that there is a persistent reduction in the retention ratio of US NFCs, which possibly explains the slowdown in the rate of accumulation that has been observed for the US during the same period in Figure 13. To illustrate the similar path that the retention rate and the capital accumulation rate have followed over the past decades in the US and thus depict the interrelationship between the process of reinvestment of corporate profits and the growth rate in the business capital stock, I put the two trends ‘cheek-to-cheek’ in Figure 16 below, as others have done as well\(^{534}\). What emerges from that juxtaposition is the fact that retained profits condition accumulation\(^{535}\).

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\(^{535}\) DUMENIL & LEVY, supra note 534, 153
US Nonfinancial Corporations' Retention Ratio in relationship to rate of growth of US business capital stock, 1960-2010
7.4. ‘Downsize and distribute’ in action: The evolution of corporate payout policy in the post-Bretton Woods era

7.4.1. The increasing equity payout ratio of capital-intensive firms

Financial economics suggest that the retention ratio is the inverse of the dividend payout ratio, which is the percentage of earnings paid to shareholders. This means that the reduction in the rate of retained profits that we noticed in the previous section must be accompanied by an increase in the dividend payout ratio. From an analytical point of view, the fact that payouts to shareholders increase must be causing the reduction in the rate of reinvestment of profits and further the reduction in the rate of capital accumulation. This logical assumption, however, needs to be backed by empirical data, before it can be accepted as possibly holding true.

Several studies have been carried out on the issue of the evolution of corporate payout policy in the US. These studies seem to agree on: (i) the fact that aggregate real dividends show a consistent increasing tendency over the past decades; (ii) the fact that stock repurchases have gradually become a major payout vehicle; and (iii) the fact that the proportion of firms that pay out profits to their shareholders, either in the form of traditional dividends or by undertaking stock repurchases, is declining over time. This final trend, which at first sight seems to be contradictory to the assumption we are trying to prove, has given rise to a series of papers centered on the issue of ‘disappearing dividends’.

However, the fact that for instance the percentage of firms paying dividends in the US had fallen from 66.5% in 1978 to 20.8% in 1999 should not trick us into believing that the overall dividend payout ratio had been falling during the same period. The reduction in the percentage of non-paying firms is due to the changing characteristics of publicly traded firms; newly listed firms always tend to be smaller. Payers are found to be about 10 times as large as non-payers and non-payers are found to be firms with a higher Tobin’s Q, which implies that they have valuable intangible assets, goodwill, a stock of patents and good managers, rather than a stock of physical assets. Therefore, the non-paying firms are not so crucial for capital accumulation, while the paying firms seem to be the large industrial firms that if they had been reinvesting their profits at a higher rate, then their behavior would make a difference for the

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536 See Harry DeAngelo et al., Corporate Payout Policy (2009), 36
538 See Eugene Fama & Kenneth French, Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?, 60 Journal of Financial Economics 3
539 Id., at 3-4
540 Id., at 4
541 Eric Lindenberg & Stephen Ross, Tobin’s Q Ratio and Industrial Organization, 54 Journal of Business 1, 4
aggregate capital accumulation dynamics in the US. Therefore, despite the ‘disappearing dividends’ header of that line of literature, it seems that those firms that actually matter for capital accumulation do continue to pay dividends and at a higher rate.

The same ‘concentration’ of dividends in only the largest firms is also observable in the EU, where the percentage of firms paying dividends to shareholders has also decreased from 88% in 1989 to 51% in 2005 due to the fact that the financial characteristics of the ‘typical’ publicly traded company have changed; from 1978 onwards newly listed firms tend to have low profits, high growth opportunities, and an asset base tilted heavily towards intangible rather than fixed assets. It is no surprise then, that in the US, Germany, France and Japan dividend payers were found to account for more than 92% of the aggregate market capitalization in the 1999-2002 period.

In accordance with the above remarks, in most jurisdictions there exists a large difference between mean and median real dividends. While the median real dividend per payer is low and decreases over time, as it is less affected by the small number of large payer firms that pay well in excess of the vast majority of listed firms, the mean real dividend per payer, which is more affected by the large capital-intensive payer firms, increases over time explaining the fact that aggregate real dividend payouts are observed to have been on the rise. Despite the sharp decline in the percentage of firms that pay dividends, the increase in dividends by top-tier firms far exceeded the modest simultaneous reduction in dividends from the loss of many small payers from the bottom tier.

Figure 17 shows the increase in mean real dividends per payer in the US, Canada, the UK, France and Germany for the years 1990 to 2002:

Now focusing only on the paying firms, which are those, whose structural characteristics make us believe that they matter the most for capital accumulation, we observe that in the EU15 countries there is an increase in their mean total payout ratio for the years 1989 to 2005 (Figure 18).

543 Id., at 349
545 DEANGELO ET AL., supra note 536, 74 (referring to the US case)
Mean Real Dividend per payer, 1990 - 2002
(in mn, local currency)
7.4.2. The catering theory of dividends as an indication of the causality link between the Great Reversal in Corporate Governance and the increased equity payout ratios

Obviously, the question, which was set at the beginning of the previous sub-section on whether there is evidence that the reduction in the retention ratio is due to an increase in the equity payout ratio, is answered in the affirmative, after reviewing Figures 17 and 18. However, the question that remains unanswered is whether this increasing payout ratio can be causally attributed to the management’s increasing orientation towards shareholder value. If not, then this study’s First Hypothesis is substance-less, because the establishment of a causality relationship between the Great Reversal in Corporate Governance and the increase in the payout ratios initiates the causality chain of the First Hypothesis (see Figures 2). As it has been mentioned in the introductory part to this Chapter, this question will be answered decisively in Chapter Two along with the question of whether the Great Reversal in Shareholdership is also responsible for increased payout ratios. Nevertheless, at this point the reader deserves at least some indication that there is value in this causality claim. The so-called ‘catering theory of dividends’ can provide this indication and establish the possibility of some link between the payout trends observed in Figures 17 and 18 and the Great Reversal in Corporate Governance. This theory asserts that companies supply dividends to meet investor demand. This explains why dividends tend to disappear during pronounced booms in growth stocks and reappear after crashes in such stocks; investor demand is sentiment-driven, so it is natural that investors will request dividends, when they feel most unsafe and they want to part with liquidity (see the Keynesian ‘liquidity preference’ in Section 1.2).

At the heart of the theory that dividends are distributed to satisfy demand on behalf of the shareholders, lies the character of a firm, whose managers are sensitive to the capital markets; a character that did not exist in the era of managerial capitalism, when the Berle-Means corporation’s managers were devising a corporate governance model that was not influenced by the stock market. Demand for dividends has grown as stockholders have become more yield-conscious; the change in the shareholder structure that brought more institutional investors in the forefront that compete to each other and have to return gains to their beneficiaries has made them more demanding towards the firms. It is natural then, according to the catering theory of dividends, to notice a rise in the equity payout ratios around the world over the past decades, so this theory provides some indication that rising equity payout ratios stem from the Great Reversal in Corporate Governance.

547 See Malcolm Baker & Jeffrey Wurgler, Appearing and Disappearing Dividends: The Link to Catering Incentives, 73 JOURNAL OF FINANCIAL ECONOMICS 271
The assumption that lies at the heart of the catering theory of dividends that the increasing payout ratios can be attributed to the greater sensitivity that managers show to the shareholderist logic of the modern capital markets is empirically backed by the fact that stock repurchases are globally on the rise as transitory vehicles of distribution (Figures 19 and 20). Stock repurchases serve three functions, all of which are related to the position of the firm inside the capital markets and to the increasing deference that firms pay to shareholder value. Therefore, if distributions via stock repurchases are found to be on the rise, it follows that firms are becoming more deferent to the preferences of shareholders, since they choose the distribution vehicle most favorable to shareholder value (for more on stock buybacks’ effects and mechanics see Chapter Four, 3.1). To be sure, the three functions that stock buybacks serve are:

i. **Signaling:** In the modern capital markets management wants the firm’s share price to be as high as possible for three reasons: (a) a high share price functions as a ‘natural’ takeover defense, as it makes the acquisition of a controlling block of the firm’s shares through a public takeover bid very expensive; (b) the firm can raise more equity capital in case it decides to make a seasoned equity offering; and (c) managers will realize higher capital gains by cashing in their stock options, which form part of their compensation. Therefore, it is essential for management to be able to signal through some device to the investor community that they have private information regarding the firm’s future profitability. By initiating a stock buyback the firm is signaling to the markets that the share price is lower than a valuation of the firm’s fundamentals would suggest. Thus, share buybacks are used as signaling devices to legally manipulate the share price.548

ii. **Boosting earnings per share (‘EPS’):** EPS is the standard measure employed by the investor community in order to measure the profitability of a firm. Since EPS is calculated as net income divided by the number of outstanding shares, a share buyback reduces the denominator and boosts EPS. A higher EPS will attract more interest in purchasing this firm’s shares and the stock price will go up.

iii. **Share buybacks are also effected for practical reasons, in order for shares to be distributed to managers and employees within the scope of stock option programs.**

Therefore, until Chapter Two clears out any doubt that there is a link between the Great Reversal in Corporate Governance and the increase in the equity payout ratio and the concomitant reduction in the rate of capital accumulation, the catering theory of dividends in connection with the empirical data on the use of stock buybacks by corporations provide some indication that the study’s First Hypothesis is plausible at least with regard to its first initiating variable, the Great Reversal in Corporate Governance.

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7.5. The Great Reversal in Shareholdership I: Equity’s reduced contribution to financing capital formation

In Section 7.4, I provided signs that something more than a mere correlation exists between the increasing orientation of corporate governance towards shareholder value and the reduction in the accumulation rate in the major Western economies. Now, the two-fold goal of Sections 7.5 and 7.6 is to provide signs that equity in public corporations has become impatient and that it is this very characteristic of equity that actually makes the orientation of firms towards shareholder value so detrimental for the capital accumulation dynamics in an economy. In other words, the goal here is to show that the Great Reversal in Shareholdership has indeed occurred and—along the lines of the First Hypothesis—to provide an indication that this reversal coupled with the Great Reversal in Corporate Governance is causally linked to the increased equity payout ratios. As with the relationship of the Great Reversal in Corporate Governance and the accumulation dynamics, the discussion on whether the relationship between the Great Reversal in Shareholdership and the observed trends in payouts and accumulation amounts to causation will of course be completed in Chapter Two.

7.5.1. Indications of a causality link between short-term shareholdership and low retention ratios

Impatient capital is poorly equipped to finance investment and fixed capital formation. Myopic investors are less likely to allow the funds they provide the firm with to be recycled into long-term capital-intensive projects before the latter come to fruition and the funds return to them in the form of dividends or other transitory distributions. On the contrary, long-termist investors having in a self-disciplined way already accepted a certain degree of irreversibility for their equity investment by committing not to liquidate their position at the first opportunity to realize capital gains won’t be at odds with the firm using their funds for a capital investment that de facto is characterized by a substantial degree of irreversibility. It follows that not any shareholder value orientation on behalf of the firm is detrimental to capital accumulation; only the shareholder value orientation that has as its benchmark the preference function of a short-termist shareholder. Thus, the Great Reversal in Corporate Governance cannot be per se detrimental to capital accumulation dynamics, if it is not accompanied by the Great Reversal in Shareholdership. Equity payout ratios wouldn’t be so high, if the shareholder value approach was informed with the set of preferences of the long-termist shareholder; retention ratios wouldn’t be so low in the presence of more long-termist equityholders in the firms’ shareholder structure, which the shareholder-oriented managers would have to serve. Thus, the causality links suggested in Sections 7.1. to 7.4. presuppose that

Barry Bosworth, Comment, on Lawrence Summers, Taxation and Corporate Investment: A q-Theory Approach, 1 Brookings Papers on Economic Activity 67, 131
the second variable, i.e. the Great Reversal in Shareholdership, is already present in the beginning of the causality chain (for a more concrete analysis on how shareholder value orientation should be accompanied by short-term shareholdership to produce the negative results on capital accumulation see Section 3.4. of Chapter Two).

But, is it safe to suggest so rigorously that short-term shareholdership, which lends its preference function to shareholder value, is so hostile to fixed investment? In other words, is there an indication that short-term shareholdership is hostile to the reinvestment of profits and thus that it may have caused the low retention ratios and the concomitant high equity payout ratios discussed in Sections 7.3 and 7.4 above?

Empirical research provides such an indication by showing that those firms, whose equity is owned by a significant percentage of short-termist shareholders, tend to cut down R&D spending, which is a widely-used proxy for long-term investment. This makes sense, since the potential value created from a long-term project might not be fully reflected in the stock price because of investors’ myopia; therefore, managers might not be able to afford this mispricing in the stock and will thus take a capital budgeting decision that does not favor the long-term prospects of the firm. A high proportion of ownership by institutions exhibiting transient ownership characteristics, such as high portfolio turnover, diversification and momentum trading, has been proved to significantly increase the probability that managers will cut down R&D to boost earnings. Greater ownership by short-termist investors has been shown to amplify the decrease in investment that modern corporations experience; long-term equity ownership, to the contrary, is likely according to the same studies to dampen that reduction in investment.

Consequently, the empirical data on the reduction of R&D in firm’s with a high proportion of short-termist investors in their shareholder base provide an indication that it is plausible for the First Hypothesis to suggest a causality link between the Great Reversal in Shareholdership and low retention ratios or –the exact inverse- high equity payout ratios.

7.5.2. Equity as a negative net source of capital: A proxy for short-termism

Has the Great Reversal in Shareholdership really occurred though? In light of the above, it is plausible to assume that if equity in public corporations is predominantly short-termist, as I have suggested in Section 4.2.1. of the


551 [WORLD ECONOMIC FORUM, supra note 137, 42](http://www.weforum.org/pdf/2011/01/15/137.pdf)

552 See Brian Bushee, The Influence of Institutional Investors on Myopic R&D Investment Behavior, 73 THE ACCOUNTING REVIEW 305

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Introduction, then it must be found to be an insignificant – and perhaps even negative- net source of capital formation.

Thus, apart from the average holding period of stock, which is an obvious measure of shareholder short-termism, the percentage, by which equity contributes to capital formation in modern corporations, can also be treated as a proxy – subject to certain limitations- for shareholders’ time horizons. If this contribution is found to be decreasing over time, then there is an additional argument to back the premise for the occurrence of the Great Reversal in Shareholdership.

Figures 21-23 show that indeed equity in the US, France and Germany has over time moved towards the direction of being a negligible – even negative in the case of the US and Germany- source of capital formation and physical investment; this is a sign that shareholders have increasingly been generating a short-termist bias in corporate governance and in the US and Germany they have even caused net outflows from corporations. Figure 24 shows that in the UK equity has strengthened its position as a financing source of capital stock, which could possibly explain why under Figure 12, the UK was identified as the only one in this set of countries to be experiencing an increase in the rate of capital accumulation in some of the years of the post-Bretton Woods era.

According to the Figures, it seems that, especially in France and Germany, bank credit has increasingly provided precisely the functions that one would expect of a risk sharer: banks have showed the willingness to ride out current losses in the expectation of future compensation, thus allowing for the promotion of capital formation and investment activities. This is essentially an equity type of service that in theory should have been expected by the shareholders554, who according to the Figures below show a lower level of commitment in the post-Bretton Woods world.

554 The same trend has been noticed in the case of Japanese banks by Colin Mayer, New Issues in Corporate Finance, 32 EUROPEAN ECONOMIC REVIEW 1167, 1181
Gross Sources of Finance (in % of physical investment), US Nonfinancial corporations, 1960-2006
Net Sources of Finance (in % of physical investment), French Corporations, 1985-1994
Gross Sources of Finance (in % of physical investment), German Nonfinancial Corporations, 1960-2005
In Sections 3-6 I presented many developments that in theory might have induced shareholders in the major Western economies to hold on to their investment for shorter periods of time (for a summary see Figure 10). In the previous subsection I treated equity’s reduced contribution to capital formation as a proxy for shareholders’ short-termism providing indications that the Great Reversal in Shareholdership actually occurred. In this section though I intend to present the progress in the most representative measure regarding shareholders’ time-horizons: the average holding period of stock.

The average holding period of stock is estimated by looking at the ratio of the market value of the shares outstanding to the value of shares traded in any given year. This is the formula used in a paper that has quickly become a classic in the growing niche of social sciences studying short-termism, Andrew Haldane, *Patience and Finance*, (Sept. 2010), 16. Available at [www.bankofengland.co.uk/publications/speeches/2010/speech445.pdf](http://www.bankofengland.co.uk/publications/speeches/2010/speech445.pdf)
However, some may treat this as not a very good proxy for the holding period, since the stock may have a sub-group of very long holding period owners, but high turnover among the remaining investors. The median holding period might be a better proxy for shareholders’ time horizons and indeed some studies use it instead of the average (mean). It is important to understand this limitation in using the average holding period of stock as a proxy to make our case, but it is difficult to identify the median holding period for the entirety of investors in large stock exchanges, like the NYSE and the LSE, where the world’s largest firms are listed, as this would require the collection of data on actual ownership length.

Figures 25-27 show a convergence between the shareowners of corporations listed in the NYSE, in the LSE and in the French Bourse in the issue of the holding period of stock; in all three stock exchanges shareowners show a tendency to reduce the time, during which they remain invested in the stock of a particular corporation, especially after the breakdown of the Bretton Woods arrangements. In the NYSE the average holding period of stock around the year 1970, i.e. before the initiation of events that led to the collapse of the Bretton Woods system, was 6 years; in the year 2002 it was less than one year (Figure 25). In the LSE the average holding period of stock was 5 years around 1970; it was less than a year in 2004 (Figure 26). In the French Bourse the average holding period of stock was 5.5 years around 1970; it was just over a year in 2006 (Figure 27).

See Atkins & Dyl, supra note 374

See Randi Naes & Bernt Arne Ødegaard, What is the Relationship Between Investor Holding Period and Liquidity. (April 2007)

For smaller stock exchanges, like the Oslo Stock Exchange, authors have been able to conduct such accurate studies, see Id.
Average Holding Period of Stock (NYSE, 1950 - 2002)
7.7. The limitations of the First post-Bretton Woods economic slowdown

The First Hypothesis at economic growth of the western (see Figure 11) with a great reversal that affected shareholders, in the last four decades, between the two great reversals a rate of physical capital accumulation mentioned in section 7.2, this trend of physical capital (and investment) is the most fundamental determinant of economic growth.

However, in absence of a more rigorous quantitative analysis, the observed relationship between the trends of the post-Bretton Woods growth rate of physical capital accumulation (see Figures 12 and 13) and the post-Bretton Woods GDP growth rate cannot be safely labeled as causal\(^5\). The analysis in sections 7.1 – 7.2 provides indications that there might be causality between the

\(^5\) However, causality for the relationship between the two great reversals and the slowdown in the growth of business capital stock can be more safely inferred by means of the Post-Keynesian model analyzed in Chapter Two.
reduction in the growth rate of business capital stock and the economic stagnation, but one could assert that instead of a causation there is a mere correlation between the two trends. Indeed, for the sake of serving the ultimate goal of this study, which is to expose corporate law’s role in the slowdown of economic growth, the First Hypothesis’s analysis does not control for other well-known determinants of economic growth that might carry equal (or greater) explanatory power for the slowdown in the GDP growth rates of the Western economies during the post-Bretton Woods era.

To be sure, apart from investment and physical capital accumulation, which is identified in economic theories of various philosophical presuppositions as a fundamental determinant of economic growth (see section 7.2), several other factors have been documented in economic literature as sources of growth.

First of all, endogenous growth models have shifted the emphasis away from physical capital to human capital. Human capital, as a determinant of economic growth, refers to labor’s acquisition of skills through education. Therefore, proxies for the quality of human capital, such as school-enrolment rates, have been treated in many empirical studies as more important drivers of economic growth compared to business capital stock.\(^{560}\)

Additionally, endogenous growth models have identified technological progress as an important determinant of growth and accordingly several studies have emphasized the relationship between innovation, R&D activities and economic growth.\(^{561}\)

Furthermore, openness to trade has been traditionally considered to be another important determinant of economic growth. Openness facilitates the transfer of technology and the diffusion of knowledge, while it is supposed to increase an economy’s exposure to competition. Empirical research has indicated that economies open to trade and to capital flows exhibit higher GDP per capita and more rapid growth.\(^{562}\) This segment of economic thought has certainly contributed to the post-Bretton Woods deepening of the European integration and to the post-Bretton Woods intensification of GATT negotiating rounds and the eventual establishment of the WTO in 1995.

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Moreover, the institutional environment in an economy has also been praised for its significance in the attainment of rapid GDP growth rates. In growth literature the term ‘institutions’ implies the formal rules, informal constraints and the enforcement mechanisms\textsuperscript{563}. Property rights, regulatory institutions, institutions for macroeconomic stabilization, institutions for social insurance and institutions of conflict management all have been noted as determinants of growth\textsuperscript{564} and their significance for GDP growth rates has also been tested empirically\textsuperscript{565}.

Finally, the demographic trends in an economy have also been identified as determinants of economic growth. Indeed, a growing number of scholars have conducted studies that link population growth, population density, migration and age distribution to economic growth\textsuperscript{566}.

After this short review of the various alternative determinants of growth the question is which of them might have contributed to the slowdown of economic growth of the western economies during the post-Bretton Woods era, which the First Hypothesis attributes mainly to the reduction in the growth rate of business capital stock.

While it would be difficult to assert that there hasn’t been rapid progress in the West with regard to technology, openness to trade and institutional framework during the last decades, the largest economy in the world, i.e. the US, did experience a slowdown in the growth rate of human capital during the post-Bretton Woods era. Empirical studies indicate a rapid educational advance in the US during the first three quarters of the twentieth century and a stagnation in educational attainment during the last quarter. To be more precise, the educational attainment of a child born in the US in 1941 was 2.18 years more than that of his parents, while the education attainment of a child born in 1975 was just 0.50 years more than that of his parents\textsuperscript{567}. Therefore, the post-Bretton Woods stagnation of the US economy can be attributed partly to the slower growth rates of human capital. However, human capital growth in Western Europe accelerated during the last three decades of

\textsuperscript{563} See Douglas North, Institutions, Institutional Change and Economic Performance (1990), 35
\textsuperscript{564} See Dani Rodrik, Institutions for High-quality Growth: What They Are and How to Acquire Them, 35 Studies in Comparative International Development 3
\textsuperscript{567} Claudia Goldin & Lawrence Katz, The Race Between Education and Technology (2008), 19
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the 20th century, so there must be other reasons why these economies stagnated in the post-Bretton Woods era.568

For the case of Western Europe strong indications exist that the demographic trends of the last decades might have had a negative impact on economic growth. There is indeed a growing ratio of elderly dependents compared to working age groups in Western Europe’s population; this ageing population changes the non-labor to labor ratio in an economy and affects the growth dynamics.569 In other words, with the population share of those being over 60 years old increasing in the developed Western European economies since the 1950s570, one could plausibly suggest that the observed slowdown in GDP growth can be partly attributed to that trend.

Finally, in the framework of the discussion of alternative reasons that might have contributed to the observed slowdown in the GDP growth rates of the leading western economies during the post-Bretton Woods era a reference must be made to the concept of diminishing returns to capital. The law of diminishing returns to capital is grounded on the assumption that ‘an increase in some inputs relative to other fixed inputs will, in a given state of technology, cause total output to increase; but after a point the extra output resulting from the same additions of extra inputs is likely to become less and less’.571 In other words, each additional amount of capital results in smaller addition to output.572 The law of diminishing returns to capital implies that the per capita growth rate is inversely related to the starting level of income per person.573 This in turn means that rich economies, as the western economies were already at the time of the collapse of the Bretton Woods arrangements, tend to grow at a slower rate than poorer economies, whose growth rate has boomed lately.574 All in all, according to the law of diminishing returns to capital the slowdown of the GDP growth rate that the western economies experienced during the last four decades might be nothing more than a natural development following the economic boom of the Golden Age of Capitalism.

568 Id., at 22ff.
569 See Thomas Lindh & Bo Malmberg, EU Economic Growth and the Age Structure of the Population, 42 ECONOMIC CHANGE & RESTRUCTURING 159
571 Paul Samuelson, ECONOMICS, 8TH ED. (1970), 25
572 John Taylor, PRINCIPLES OF MACROECONOMICS, 5TH ED., (2007), 209
573 See Solow, supra note 529
574 Robert Barro & Xavier Sala-i-Martin, Convergence, 100 JOURNAL OF POLITICAL ECONOMY 223, 224
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