
Financial Market Fluctuations and Fragility

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Abstract

Recent years have witnessed rapid financial sector liberalization, pronounced asset price fluctuations and costly episodes of financial fragility. Neo-classical economic analysis stresses the beneficial effects of financial market de-regulation and laissez-faire whilst post-Keynesian analysis highlights the inherent tendency of de-regulated financial markets to lead to financial instability. This paper reviews the contribution which these perspectives make to understanding the substantial asset price fluctuations of recent years and the specific development of the banking industries of the United States, Japan and three Nordic countries. The paper demonstrates that the post-Keynesian financial instability hypothesis contributes much to understanding these episodes of financial fragility whilst inappropriate regulation has also been a cause. Future policy should give a higher weighting to the pursuit of financial stability.

1. Introduction

This paper argues that major fluctuations in asset prices can and do lead to costly episodes of financial fragility. Both neo-classical and post-Keynesian perspectives have something to contribute to our understanding of why these episodes of financial fragility have occurred but it is the post-Keynesian perspective which stresses the tendency of de-regulated financial markets to generate serious business cycles which most contributes to our understanding of these episodes of financial fragility. The major policy lessons drawn from the discussion are that pursuing financial stability and designing appropriate regulatory systems are the major policy priorities at present.

Following this introduction, the paper's second section outlines the major features of

the neo-classical and post-Keynesian perspectives. The third section demonstrates that there have been a number of major medium-term fluctuations in financial asset prices. These fluctuations are too large and contrary to have been related to economic fundamentals. Such fluctuations seem to have become established as 'normal' features of modern economies. The fourth section discusses recent developments in the banking industry in several industrial countries and highlights the need for appropriate, effective regulation rather than a further development of financial laissez-faire. A final section draws brief conclusions.

2. Contrasting theories

Analysis based on neo-classical thinking argues that there are three major channels through which the development and liberalization of financial markets may affect the rate of economic growth. Firstly, the development of financial markets creates mechanisms which enable saving to take place. In turn, this increases the proportions of saving and investment in gross domestic product.

Secondly, the opportunity for households and firms to channel their savings to others with more productive uses for capital increases the efficiency, or marginal productivity, of capital. In turn, this should lead to increased incomes for both savers and entrepreneurs. Thirdly, increasing the proportion of savings used for financial investment enables the development of a more efficient market for capital as a whole. This too should lead to the more productive use of capital. It is these three beneficial effects which are regularly cited as the main reasons for developing, de-regulating and opening financial markets (IMF, 1993c, 1; Anderson, 1993).

In contrast, post-Keynesian analysis holds

that a critical reason for the instability of capitalist economies is the way in which their financing is structured. This has led to the elaboration of the financial instability hypothesis whose fundamental propositions have been summarized by its originator, Minsky (1986, 173) as:

1. Capitalist market mechanisms cannot lead to a sustained, stable-price, full-employment equilibrium.
2. Serious business cycles are due to financial attributes that are essential to capitalism.

According to this perspective, as financial markets become more developed and significant so their detrimental effects on the economy as a whole may become more pronounced. While liberalizing may lead to 'efficiency' the accompanying increase in uncertainty may lead to financial fragility and real economic recession.

Which is correct? The neo-classical perspective which views the development and extension of financial markets as a fundamentally beneficial influence or the post-Keynesian view which regards such developments as highly dangerous? Alternatively, is there some way in which a synthesis might be achieved? (Davis, 1992, 146).

3. Behaviour of financial asset markets

The economic environment since 1974 has been much more volatile than were the 25 preceding years. This volatility has created important new problems and opportunities for individuals, firms, governments and societies which some believe to be highly significant. According to Hutton (1994) '...volatility is a warning of the shaky foundations upon which the world's financial system is built...The volatility is like the tremor before an earthquake, the prudent take cover'. Others take a more relaxed view. Writing about the 1987 stock market crash, the single most dramatic financial asset price fluctuation of the 1980s, Toporowski (1993)

argues '...in retrospect it seems almost obvious that it had no lasting impact on the economy, politics or society.'

De-regulation and internationalization of financial markets have been major features of economic development since the mid 1970s. An examination of the record of financial asset prices in the 1980s and early 1990s shows both pronounced cyclical movements and sharp, discontinuous fluctuations. Short-term, day to day volatility has increased as have medium-term fluctuations. The reappearance of major credit-driven business cycles lends support to the financial instability hypothesis.

3.1 Asset prices in the medium term

In the last ten years there have been a number of major, medium-term asset price fluctuations. The upswing in commercial property prices from 1985 to the peak showed striking cumulative increases in Japan, France, Britain, Australia and Finland whilst equity prices registered particularly big gains in Japan, Finland and Sweden (see table 1).

Property prices boomed and slumped significantly in the 1980s and early 1990s. There were pronounced movements in many countries (see table 1). Sometimes these price swings were very dramatic. In Tokyo, for example, a 48 per cent rise in commercial property prices in 1986 was followed by a 61 per cent increase in 1987. For the next three years commercial property prices stagnated and then fell by 7 per cent in 1991 and a further 19 per cent in 1992 (BIS, 1992, 140). The de-regulated financial systems created in the 1980s seem to have been particularly prone to credit-driven property price bubbles.

3.2 Property

Real estate prices are important to the economy as a whole for several reasons. An increase in domestic property prices can stimulate consumption. Real estate is often used as collateral for business activity. It plays a particularly important role in enabling small firms to raise capital for investment projects. Because much bank lending to enterprises and persons is secured on real estate, fluctuations

Table 1: Real asset price upswings in the second half of the 1980s (from 1985 to peak, cumulative %)

	<i>Residential property</i>	<i>Commercial property</i>	<i>Equities</i>
United States	13	-15	46
Japan	74	86	166
West Germany	21	98	13
France	27	78	86
UK	60	33	41
Canada	52	1	15
Australia	22	65	25
Denmark	8	30	14
Finland	59	73	146
Norway	15	37	31
Sweden	35	52	114

Source: Bank for International Settlements, *63rd Annual Report*, June 1993, p.161

in commercial and residential property values have a significant effect on bank lending and profitability. In turn fluctuations in bank profitability and willingness to lend have wider effects on economic activity generally.

3.3 Stock markets

By their nature, stock markets display short-term volatility. Despite a vast investment in research the selection of individual stocks for any portfolio is far from an exact science. The majority of professionally managed portfolios under-perform the relevant stock market index or indices against which their performance is measured. Naturally the price of any one share at any specific moment in time is of great interest to individual investors and firms as are movements in stock market indices. Overall stock market behaviour is a public policy concern for several reasons. Amongst these are that a stock market should be one way of raising new capital for productive enterprise and of mobilising savings for investment. The stock market should also create a potential market for corporate control which should become increasingly important as large

financial institutions come to dominate shareholding. More broadly, stock market fluctuations can be seen as leading indicators for developments in the economy as a whole.

There is plenty of evidence for medium-term stock market volatility (see tables 1 and 2). In the October 1987 crash some markets saw prices decline by over 50 per cent.

Contradictory hypotheses about both the causes and significance of the great stock market crash of 1987 are still advanced and debated (Romer, 1993). The main impact of the crash was to have convinced policy makers in a number of countries to relax monetary and fiscal policy. This helped precipitate the ensuing boom which was subsequently followed by a deep recession in many industrialized countries. While the 1987 stock market crash has attracted most analytical attention, big fluctuations in stock market indices are quite normal worldwide.

Do medium-term fluctuations in stock market values matter on their own? If it is true that stock markets are essentially disconnected from the real economy then it may reasonably be argued that fluctuations are of little broader

Table 2: Stock market prices and the October 1987 crash

	<i>Pre-crash high</i>	<i>Post-crash low</i>	<i>End 1989</i>
United States	121.3	80.6	127.3
Japan	95.8	71.7	98.1
United Kingdom	136.3	87.3	135.1
Canada	122.0	84.2	116.6
Germany	124.7	73.1	132.6
France	110.8	60.5	133.3
Italy	130.1	71.8	116.6
Switzerland	120.8	74.7	126.0
Netherlands	101.7	54.9	116.4
Sweden	98.4	60.0	124.5
Spain	118.6	73.2	108.1
Belgium	97.2	63.0	116.4
Australia	155.0	77.4	110.8
Hong Kong	146.9	70.5	105.5
Singapore	144.9	67.4	142.6
Taiwan	91.3	44.9	169.3
South Korea	59.7	51.8	103.5

Source: Bank for International Settlements, *60th Annual Report*, June 1990, p.98

economic significance. If this view is taken then the main tasks for the authorities are to ensure that the markets operate freely and without fraud although, even so, at least one major way remains in which stock market values are of increasing rather than diminishing public importance. This arises because more and more people are dependent for their retirement incomes on stock market performance. The fact that there are essentially compulsory pension contributions levied on large groups of people in the industrialized countries and that these contributions are then invested by financial institutions in bonds and equities has provided a major underpinning for stock market prices to date. All the signs are that the next forty years will see a great flow of

capital into pension and mutual funds and insurances of all kinds as states disengage from collective pension provision and individuals make their own pension arrangements (Davis, 1993). So great will this phenomenon be that the performance of stock markets is bound to become a broader public policy issue as fluctuations will affect the incomes and welfare of large groups in the ageing populations of the industrialized countries. An early warning of this is to be found in the performance of with-profits endowment policies in the UK. The return on these long-term, 'safe' savings products has begun to fluctuate significantly. For example, in December 1994 the capital bonus paid per £1,000 of sum assured on ten-year endowment policies by the Sun Alliance

Company was 20 per cent. The rate of this bonus changed no fewer than five times during the year. Ten years earlier the capital bonus paid on the same policy was fifty-eight per cent.

Another concern is whether stock markets promote short-termism. A widely held view is that Anglo-Saxon type stock markets lead to levels of long-term investment which are below the optimum. This issue has been highly contentious with proponents of the long-term wisdom of shareholders vigorously pitched against those who want to see more socially conscious long-term institutional arrangements for settling questions of corporate governance. Empirical testing for short-termism in the UK stock markets has yielded reasonably robust evidence for its existence (Miles, 1993). Any tendency to stock market short-termism is made more significant by the global trend towards privatisation. Since the second world war publicly owned corporations have played a disproportionately important role in investment. As the global phenomenon of privatisation bites ever more broadly a tendency to stock market short-termism will have serious repercussions on investment and economic growth. Major medium-term swings in equity values can only exacerbate short-termism.

Banking crises and financial instability

The modern movement to financial market deregulation has been accompanied by both spectacular financial collapses and instances of prolonged financial fragility. These failures have been very costly to those directly involved and to the wider economies in which they occurred. The depth and persistence of these problems raise many questions. Amongst the most crucial is: Do these financial failures signal a fundamental tendency in the new systems to fragility and collapse? Alternatively, have they only been painful but unique, unrepeatable historic events which can be attributed to learning how to handle the transitions to and operation of modern, deregulated, internationalized financial systems? The scale of the problems and their widespread location suggest that systemic financial fragility

and failures are part of the new system which has been created. If this is the case then major reforms will be needed.

In recent times there have been several episodes of prolonged financial fragility in a number of industrialized countries. These have particularly involved the banking industry which plays a central role in providing credit and payments services for the wider economy. As a result the fortunes of banking industries have wider effects on the economy as a whole. Problems in a country's banking industry are easily transformed into problems for its financial and economic system as a whole as credit dries up. In the worst case, bank failures will mean that the payments system stops working. To prevent this, government acts to rescue the banking system. In practice, this often leads to the costly rescue of individual banks.

In the early 1990s the banking systems of Finland, Norway and Sweden all essentially collapsed. Individual banks and segments of the banking system in the United States and Japan underwent periods of great strain. Considerable public expense was incurred in resolving these episodes of financial fragility (see table 3). Major banks in the United Kingdom and France incurred large losses, which contributed to lengthening the recessions of the early 1990s. A large international banking fraud was perpetrated through the criminal operation of the Bank for Credit and Commerce International. This exposed weaknesses in the system of international banking supervision. From 1982 onwards the developing country debt crisis impaired many banks' balance sheets and cost citizens in both developing and industrialized countries dear. Germany was the only large industrialized economy to escape major banking industry problems. By 1993 IMF staff were asking 'why after a long post-war period of stability have banking problems occurred with such frequency?' (IMF, 1993c, 2).

There are a number of reasons why bank failures and episodes of pronounced financial fragility may occur (Davis 1992, 117-46). Post-Keynesian thinking tends to stress the instability which can be generated by the way in which

Table 3: Loan performance and government support of banks
in selected countries (per cent of GDP)

	<i>Loan losses 1991-92</i>	<i>Non-performing loans, 1992</i>	<i>Government support</i>
Japan	-	2.7	-
Finland	6.0	10.9	4.0
Norway	4.2	-	2.8
Sweden	6.7	-	3.1
United States			
- commercial banks	1.0	2.4	0.5
- savings and loans	-	-	3.2

Source: IMF, *International Capital Markets, Part II: Systemic Issues in International Finance*, August 1993, p.2

firms and individuals take on debt in the expectation of increasing financial asset prices. Stress is placed on the significance of uncertainty which, by its nature, cannot be reduced to rationally calculable probabilities (Dow, 1996). This perspective generates policy proposals which would put significant brakes on financial liberalization. By contrast, neo-classical and monetarist analyses stress the importance of bank runs and panics on the one hand and market failings due to either poorly designed regulation or asymmetric access to information.

From the mid 1970s onwards banks have faced major challenges arising from deep-seated structural change. Banking has become increasingly internationalized, financial markets have been deregulated and new financial institutions, markets and instruments have developed. Banks have had to compete in a fast moving, uncertain business environment. Many leading international banks and much of the banking system in some countries has become less risk averse and more disaster prone. The lending strategies of banks have exacerbated asset price fluctuations - sometimes on a spectacular scale - as in Finland, Norway and Sweden.

4.1 The Nordic Banking Crises

The banking crises which swept Finland, Norway and Sweden in the early 1990s revealed major weaknesses in the functioning of these countries' newly de-regulated financial systems. The estimated cost of resolving these crises was US \$1,000 *per capita* (*The Banker*, 1993, 20-22). In all three countries the respective banking crises weakened public finances and made a major contribution to their worst economic spell for more than 50 years (see table 4).

There were a number of common features in the Nordic banking crises. In all three countries the financial system was de-regulated in the mid 1980s. Interest rate and credit controls were abolished. Foreign competition in the banking industry was permitted. In all three countries this liberalization was followed by a credit boom. The credit boom fuelled a rapid rise in asset prices. In turn, the rise in asset values was used by some bank customers to secure further bank lending. By the end of the credit boom many banks had made large loans to finance real estate transactions and had generally taken on lending to less creditworthy borrowers. As soon as an economic downturn began some of the banks' customers began to default on their loans. Real estate taken to cover such loans proved to be less valuable

Table 4: Bank support operations in Norway, Finland and Sweden

	<i>Total support (% GDP)</i>	<i>Government support (% of government deficit)</i>
Norway		
1991	2.0	298.9 ¹
1992	1.7	50.6 ¹
Finland		
1991	0.9	13.2
1992	7.3	78.1
Sweden		
1991	0.3	19.8
1992	2.0	26.0

Note: ¹ excludes a concessionary loan for which all banks were eligible

Source: Bank for International Settlements, *63rd Annual Report*, June 1993, p.172

than originally envisaged. The property price boom was quickly followed by a slump. At the same time, the economic downturn inevitably led to an increase in bankruptcies. The overall result was an increase in bank loan loss provisions. As the problems intensified a number of banks needed massive state help to avoid default. The worst affected banks were those whose managements had acted imprudently during the boom. Enough banks were involved for the problems of an initial few to be transformed into a crisis for the many. It seems that the increased competition which had accompanied de-regulation seems to have generated little in the way of effective diversification, successful new business or increased reserves to help cover the losses sustained as recession or slump hit the banks' customers (see table 5). The experience of these stable, affluent Nordic countries leads significant support to the post-Keynesian perspective. Gains in economic efficiency attributable to the increased efficiency of de-regulated financial markets have been greatly outweighed by the costs arising from the increased instability. There is little evidence in these episodes to support the neo-classical contention that the main cause of financial instability is government intervention (Benston and Kaufman 1996; Dowd 1996).

In all three countries the authorities chose to

deal with the problem by pumping in large volumes of public money to re-organise and re-capitalise the affected banks. This meant a substantial, albeit temporary, extension of state ownership - hardly what had been envisaged.

The cost of the banking crisis was highest in Finland (see table 3). Finland's banking crisis was preceded by a huge boom in credit. The ratio of bank lending to GDP rose from 55 per cent in 1986 to 76 per cent in 1990 with the rate of increase being particularly rapid in 1989-90. In 1991 the Bank of Finland had to rescue Skopbank, a commercial bank which also acted as central bank to the savings banks (The Banker, 1993:20-22). In April 1992 the government established its Government Guarantee Fund to help ensure the stability of the banking system. By the end of that year it had spent the equivalent of 2.9 per cent of Finnish GDP on support operations (IMF, 1993c, 7-8). The Finnish authorities also had to rescue the Kansallis/Osaki/Pankki/STS bank and to provide substantial funding for the wholesale re-organisation of Finland's savings banks. By the end of 1992 the share prices of Finnish banks were just 10 per cent of those in mid 1989.

In Sweden too, the banking crisis of the early 1990s was preceded by booming credit expansion. Between 1986 and 1990 the ratio of bank lending to GDP rose from 43 per cent to

Table 5: Bank profitability in Finland, Norway and Sweden:
Profits before taxes (% total assets)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Finland	0.34	0.30	0.34	0.39	0.45	0.34	0.68	0.21	0.21	0.10
Norway	0.81	1.18	1.17	0.92	0.95	0.04	0.13	0.32	0.83	3.94
Sweden	0.30	0.37	0.30	0.30	0.90	0.66	0.54	0.41	0.19	0.58

Source: OECD, *Bank Profitability: Statistical Supplement - Financial Statements of Banks, 1982-91* (Paris, 1992)

68 per cent. In 1990, a combination of tax reforms and recession brought about abrupt falls in real estate and other asset prices. By autumn 1991 the government owned Nordbanken was making loan loss provisions equal to 0.3 per cent of Swedish GDP. This was a forerunner for wider problems in the banking industry which climaxed in September 1992 when Gota Bank, the country's fourth largest commercial bank, filed for bankruptcy. By the end of 1992 the share prices of Swedish banks were a mere eighth of their 1989 values. As in Finland, the government took costly measures to bolster the banking system and save Sweden's banks from going bust. By late 1992 every Swedish bank rated by Moody's (1992, 76), including Gota Bank, enjoyed the 'investment' grade rating which is a necessary condition for a bank's continued trading. By 1993, the total cost of the rescue operations was estimated to be more than five per cent of Swedish GDP (IMF, 1993c, 8).

The Norwegian banking crisis emerged earlier. In 1987, after several years during which credit grew at more than 30 per cent annually, a turning point was reached. Norwegian bank share prices peaked and the banking industry recorded a small overall loss. For the next two years credit problems were widespread. A number of smaller Norwegian banks were taken over after requiring help from two industry operated deposit insurance funds. After a brief respite in 1989 the problems intensified. By 1992 the government had been forced to take a controlling interest in three of Norway's largest banks, the Den Norske Bank, Christiana Bank and Fokus Bank. The estimated total cost of the

various rescue packages and support schemes was 4 per cent of Norwegian GDP (*The Banker*, 1993, 20-22). The salient features of these episodes correspond closely to those outlined by Minsky's financial instability hypothesis.

The Nordic banking crises illustrated some of the dangers of de-regulation. Particularly noteworthy was the way in which a credit bubble followed the liberalization of the financial system. The credit bubble fuelled a rapid rise in asset prices which finally fell sharply. As loan losses multiplied credit problems for individual banks turned into a crisis for the entire banking system. These crises were only resolved at great cost to the public finances and economies of Finland, Norway and Sweden.

4.2 Financial disruptions in the United States

Much of the financial sector in the United States went through a disastrous decade during the 1980s. The biggest problems experienced were largely due to a mixture of inappropriate regulation and competitive pressure leading to wrong management decisions. In addition there were problems generated by brief financial bubbles. The specific historical evolution of the banking industry in the US was also a significant factor. This included great hostility to central bank influence, a rigid separation of investment from commercial banking and significant barriers to inter-state banking. This meant that the huge US banking industry had many features quite unlike those of other major industrial countries as it entered the 1980s.

One of the most significant US banking

problems during the 1980s was experienced in the main lending institutions of the previously obscure housing finance industry. The savings and loans banks, or thrifts as they are popularly known, were mostly small institutions providing housing finance to households in their immediate locality. Initially based on the model of the English building societies they played an important role in promoting the New Deal programme initiated by President Roosevelt in 1933. Forty years later, as much of their original mission was completed and the New Deal settlement unravelled, the thrifts came under pressure. The thrifts main source of finance was deposits from savers. This borrowing was at low, government regulated rates of interest. The enforcement of the Federal government's Regulation Q gave savers no effective choice of deposits. With their own cheap source of finance secure, the thrifts then went on to lend to finance house purchases at fixed, low rates of interest. One of the responses to the great inflation of the mid 1970s was that regulation Q was abolished in 1979. An unintended result was that savers took their money out of the thrifts and invested instead in money market mutual funds which offered a better rate of return at no appreciably greater risk. As real interest rates started to rise during the 1980s a fundamental structural problem for the thrifts arose. Their source of finance was at floating and increasingly expensive rates while their lending was at fixed rates. Furthermore, much of their existing loan book was fixed at unduly low rates. In order to try to deal with this fundamental, structural problem the thrifts borrowed on wholesale money markets and pressed for de-regulation to enable them to extend their activities into apparently more profitable areas such as lending on commercial property. One result was that there was plenty of money chasing a higher reward in relatively unfamiliar markets. This led to disaster as commercial misjudgement fuelled an ever more desperate search for higher rates of return. Waste, fraud and abuse played a part in the demise of many thrifts. But the underlying cause was that de-regulation created an unsustainable business position for

many of the thrifts whose social purpose had essentially been served. Those people fortunate enough to take out mortgages in the late 1960s and early 1970s enjoyed many years of extremely cheap housing finance. There was a big bill to be paid for all of this. Combined with the effects of mismanagement and fraud the actual losses sustained in the savings and loans fiasco were estimated by the Congressional Budget Office to total a present value of US \$ 180 billion at 1993 prices. Government support for the thrifts over the 1980s accounted for a quarter of the total US government budget deficit. The total cost was estimated to be the equivalent of 2 per cent of 1992 US GDP (BIS 1993, 171). That this cost was largely borne by the US taxpayer was the unintended result of another aspect of regulation. Deposit insurance in the United States is very generous. Each account up to \$100,000 is fully insured against a bank collapse. Depositors may have several, fully insured accounts. This is in sharp contrast to the UK, for example, where only 75 per cent of deposits are insured up to £20,000 per depositor. This meant that depositors were able to look for the thrifts offering the highest interest rates and simply ignore any risk, secure in the knowledge that should the bank become insolvent the government would pay. The experience of the thrifts lends support to those perspectives stressing the way in which markets will work rationally in order to undermine inappropriate price-fixing and regulatory schemes. The experience of the thrifts highlights the dangers of inappropriate regulation and provides support for those who see 'government as the problem' (Benston and Kaufman 1996, 697).

Bad banking strategy also played a big part in the problems which afflicted the United States' banking industry. The headlong rush into developing country debt has been well documented. This hung heavy over the US banks for much of the 1980s with major losses actually being taken on most US money centre balance sheets in 1987, once the risk of default had safely passed. The US banks entered the 1980s as some of the very largest financial

Table 5: Bank real estate lending in selected countries

	1985	1987	1991
	<u>% of total loans outstanding</u>		
United States			
- total	29	34	42
- commercial	13	17	17
United Kingdom			
- total	19	23	31
- non-housing	7	8	12
Japan	13	15	17
	<u>% of loans to private sector</u>		
Canada	33	39	49
France	29	29	31
Germany	46	45	40
Norway	48	41	52
Portugal	28	33	32
Spain	19	20	29

Source: BIS, 62nd Annual Report

institutions in the world. They left the 1980s much reduced. Changes in the regulatory structure allied with the dominant competitive response accounted for much of the decline. One key feature was that the real value of a bank license became substantially less as non-bank financial institutions were allowed to compete in providing consumer credit and financial services. Automobile manufacturer General Motors and major retailer Sears Roebuck were amongst the leaders in this new, effective competitive wave.

Bank managements responded to the competitive challenges in different ways. In general, they sought to move out of traditional banking and into a variety of much more risky financial endeavours. One popular strategy was to seek economies of scale by rapid growth. In practise, this meant increasing exposure to potentially more profitable but riskier credits. This underpinned a major move into real estate lending which increased by about 50 per cent

over the 1980s while commercial and industrial loans went down (see table 6). In practice, property price bubbles caught banks out. The demise of the Crocker Bank in California and that of major regional banks in New England were two prime examples. Other banks became involved in financing, so-called 'Highly Leveraged Transactions'. This involved banks lending to finance management buyouts or takeovers. Naturally, this sparked equity price bubbles which were often un-related to the fundamental, operating values of the businesses concerned. Large losses were eventually recorded (Borio 1990). A third example of banking on financial bubbles came in the 'junk bond' episode. Bonds rated as below 'investment grade' paid higher rates of return. Initially, it appeared that the market was inefficient and that default was rarer than the premium interest rates allowed. As soon as an economic downturn materialised the secondary values of many of these bonds collapsed and

some bonds went into default. Between 1989 and 1991 260 issuers of public debt in the US defaulted on \$55.4 billion (Moody's, 1992, 6). By contrast, roughly the same number of firms defaulted on a total of just \$8.4 billion in the entire period from 1970 to 1988.

These three bubble-related aspects of banking received much attention at the time. The underlying pressures on bank managements were not solely reducible to a get rich quick mentality. Changing competitive circumstances combined with an inadequate regulatory response played a major role. The government overestimated the benefits from increased allocative efficiency resulting from greater competition whereas the losses due to increased macro-economic instability were underestimated. In the end, the taxpayer picked up the cost of these disasters - at a total price tag estimated to be equivalent to approximately 1 per cent of United States GDP (BIS 1993).

4.3 Financial strains in Japan

Banking problems in Japan were less severe than those in the Nordic countries or the United States. Nonetheless, they contributed to worsening the Japanese recession of the early 1990s.

There was considerable growth in Japanese bank lending during the 1980s. At the beginning of the decade the ratio of bank lending to nominal GDP was 61 per cent. After a particularly pronounced surge the ratio peaked at 94 per cent of nominal GDP in 1990. Much of this lending was used to finance real estate transactions or was secured on real estate (see table 7). Bank lending for real estate purposes grew at an annual average of 19 per cent from 1983 to 1990 which was faster than in any other major country (Takeda and Turner 1992, 61). When land and property prices crashed in the late 1980s and early 1990s many Japanese bank customers were unable to meet their loan repayments.

The big decline in Japanese stock prices at the turn of the decade made the banks' situation still worse. Many of their customers had planned to repay their borrowings on the basis of anticipated capital gains made on the stock

market. But, projected gains had turned into real losses. Furthermore, the banks themselves held a considerable proportion of their capital in shares and as prices slid so the value of their capital fell. Another major area of bank lending had been to finance, leasing and housing finance companies. These companies were badly affected by the crash in asset values and the onset of the recession. This made the banks' loan losses still worse.

The net result of these problems was that by 1994 Japanese banks had declared bad loans equal to 2.9 per cent of Japanese GDP (*Financial Times*, 1994, 34). As the only loans included in this total were those on which no repayments had been made for at least 6 months plus loans to bankrupt enterprises this statistic greatly understated the dimensions of the problem. Even the City banks whose exposure to directly property related loans was less than banks in general found that their loan losses trebled from 1990 to 1991 (see table 8).

The Japanese government took several steps to help the banks overcome these problems. Their fundamental strategy was to 'buy time' in order to allow the banks to earn their way out of their debt problems. In addition, a certain amount of judicious re-organization of the banking industry was promoted. Direct help was given to banks in a number of ways. The 1992 economic stimulus package provided for the purchase of equities by various public pension, savings and welfare corporations. Administrative 'guidance' was given to large private institutions such as insurance companies to buy Japanese equities (Dawkins, 1994, 33). The stabilization of equity prices promoted business confidence and saved the banks from further downwards revaluations of their capital. Favourable accountancy and taxation measures were announced in August 1992. These permitted banks not to count stock market losses in their interim accounts unless the shares were actually sold as the potential losses realized. By September 1993 a tax ruling had come into force, allowing domestic loans loss provisions to become fully tax deductible twice as quickly as before. The overall result of these measures was that a crisis in Japanese banking

Table 7: Loan concentrations in Japanese banks (% all loans)

	<i>Manufacturing</i>	<i>Real estate and nonbank finance companies</i>	<i>Small business</i>
City banks			
- 1980	32.9	15.9	37.5
- 1992	21.0	19.5	54.8
Long-term credit banks			
- 1980	36.2	15.8	27.2
- 1992	12.3	36.9	41.6
Trust banks			
- 1980	30.9	13.2	22.3
- 1992	9.0	42.8	46.1
All banks			
- 1980	32.6	10.9	32.5
- 1982	13.2	26.3	50.4

Source: Bank of Japan, *Monthly Economic Statistics*, special tables

Table 8: Bank profitability in Japan (% of average total assets)

	<i>1986</i>	<i>1987</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>
All ordinary banks						
- loan loss provisions	0.04	0.03	0.05	0.04	0.03	0.07
- profits before taxes	0.52	0.60	0.64	0.46	0.36	0.32
City banks						
- loan loss provisions	0.03	0.03	0.16	0.05	0.03	0.09
- profits before taxes	0.50	0.63	0.68	0.46	0.33	0.30

Source: OECD, *Bank Profitability: Statistical Supplement - Financial Statements of Banks, 1982-91* (Paris: OECD)

was avoided and that instead banks were allowed to earn themselves out of trouble over a lengthy period. There were, of course, significant direct costs to Japan's public finances in terms of foregone tax revenue.

In Japan, financial fragility did not reach the level where there were major threats to the functioning of the payments system or the allocation of capital. There were, however, significant effects outside as well as within the financial sector and on the level of economic activity. The pattern of events described lends some support to the financial instability hypothesis while lending no support to Dowd's contention that there is no 'reason to expect

banking instability arising from the ways in which banks relate to each other, either because of competitive pressures, or because of contagion' (Dowd 1996, 681).

5. Conclusions

Asset price fluctuations matter. Such fluctuations are normal features of modern economies and are linked to significant business cycles and episodes of financial fragility. As a study by the Monetary and Economic department of the Bank for International Settlements (Borio, Kennedy and Prowse, 1994, 9) stated recently: 'It is widely believed that the boom-bust nature of asset price fluctuations has

exacerbated the business cycle, fuelling the upswing, magnifying the downswing and slowing the current recovery.'

The evidence reviewed lends support to the view that explanations emphasising the inherently unstable nature of de-regulated financial markets and those drawing attention to the costs of inappropriate or clumsily executed regulation have something to contribute. The extent to which a society reaps benefits from the new financial freedoms depends on its ability to carry out the de-regulatory process itself successfully and to introduce and then operate appropriate regulatory and supervisory systems. As we have seen, deep recessions triggered by financial market failures can more than wipe out any gains resulting from a higher proportion of investment in GDP or the more productive use of capital. Widespread mismanagement of financial institutions can and does swallow alarming chunks of national income. One crucial policy lesson is that macro-economic stability should be more highly valued. The potential gains from increased financial market efficiency must be critically weighed against the effects of increased financial fragility.

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