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The Financial System of the Netherlands

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The Financial System of the Netherlands

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Abstract: The report provides a brief historical background on the economy of the Netherlands before reviewing the growth of finance in the period of financialisation since 1980. The structure of the financial sector is discussed in terms of the forms of financial organisation including forms of banking and the role of the stock market. The evolving picture on competition in the financial sector of the Netherlands in terms of the degree of competition and its nature is then presented. This is followed by discussion of the profitability of the financial sector. The report concludes with an overview on the regulation of the financial services sector and remarks on the nature of the financial crisis in the Netherlands.

Key words: Netherlands, financial system, credit institutions, financial institutions, banking system, financial liberalization

Journal of Economic Literature classification: G01, G2, G32, N24, O52, E44

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The Financial System of the Netherlands

1. Historical, political economic and international background

Despite its small size, the Netherlands has established itself as one of the world's leading economic and financial power since the seventeenth century following its independence from Spain in 1579. Historically, the Dutch economy, considered by many as the first modern economy, instituted a leadership role in Europe and created an innovative and effusively acclaimed financial system which inspired the systems that were later developed in Great Britain and United States of America. According to Rousseau and Sylla (2003), at the onset of the seventeenth century, the Netherlands had been characterised by robust public finances, monetary stability, monetary and financial institutions (including a well organised capital market, banks – both commercial and merchant – and the *Wisselbanken* – akin to a central bank) which are jointly deemed the cardinal features of a modern financial system. This marked the beginning of the accelerated wealth accumulation and economic prosperity for the Netherlands.

The next couple of centuries marked a “golden era” of the republic as industrialisation took-off, external trade flourished and the country evolved into one of the richest and most affluent in the world. During the period, the country was renowned for exporting both commodities (goods and services) and capital (financial) to the rest of the world. In the second half of the eighteenth century, the increasing participation of the Dutch in the international capital market caused extraordinary growth, due essentially to the activities of its merchant banks. However, the traverse of Dutch economic and financial prosperity was punctuated intermittently by various political and economic upheavals including revolutions, wars and severe recessions.

A key contribution to the recovery in the post-war Netherlands came from the Marshall Plan, which provided the country with funds, goods, raw materials and produce. Besides, partly in response to the 1957 Treaty of Rome, which heralded

gradual European economic integration, Dutch firms developed corporate strategies and structures comparable to other European companies; thus becoming larger and internationally active (de Jong et al., 2011). During this period, with commencement of modern day globalisation, the Dutch government and businesses began an aggressive phase on internationalisation. For instance, the Dutch central bank – De Nederlandsche Bank (DNB) – approved a couple of mega bank mergers in 1964 based on an overriding need to strengthen the Dutch banking system vis-à-vis those of competing countries in the international financial market (Westerhuis, 2008, Westerhuis, 2004).

With this corporate and national strategy Dutch corporations, particularly Shell, Unilever and Phillips, became internationally prominent. Financial institutions like ABN-AMRO also partook in the internationalisation by expanding aggressively into major hubs like the USA. This implied that Dutch multinationals accounted for a substantial FDI flow to the rest of the world mainly to the USA. The share of outflow by the services sector has gained increasing prominence since the 1970s, exploding in the 1990s. In terms of FDI outflow the Netherlands was ranked fourth globally in 1950 and by 1999 had climbed to third with a total outflow of US\$130.7 billion; a significant proportion of which was due to Dutch financial multinationals (Westerhuis, 2008). In addition to the substantial export of financial capital, the Dutch economy has a manufacturing industry that is also largely export oriented due to the small size of their domestic market (Ter Hart and Piersma, 1990).

Then again, while accounting for export of goods and capital, globalisation ensured that the Dutch economy also hosts a considerable amount of foreign firms and their subsidiaries. In the post-war era the USA accounted for much of the inward investment in the Netherlands, constituting 51 per cent of all foreign establishments in 1946-1959 and 37 per cent in 1975-1984 while Japan – the next most important player – accounted for 7 per cent and 13 per cent during the periods 1960-1974 and 1975-1984, respectively (Ter Hart and Piersma, 1990). Accordingly, American and Japanese banks dominated other foreign financial institutions in the Netherlands. By

1986, about 3500 foreign firms were operating in the Netherlands – mostly in manufacturing and services sectors where they respectively accounted for 15 per cent and 7 per cent of all employment. Generally, foreign based manufacturing firms operating in the Netherlands targeted the European market rather than the domestic Dutch market while their trade and services counterpart concentrated on the local clientele. There are also a lot of foreign banks in the Netherlands as there are many Dutch banks abroad resulting in an intricate web of international financial transactions. Dutch financial institutions also participate actively in international financial markets where funds are sourced and/or used; thereby further integrating the Dutch system with the global market and exposing Dutch institutions to the vagaries of the foreign markets.

The Netherlands is a member of the euro area which adopted the euro currency since its inception in 1999 and has the fifth-largest economy within the euro-zone. It is largely renowned for equable industrial relations, low unemployment, price stability, significant trade surplus and a principal transportation hub within Europe. Historically, and even today, the Netherlands is one of the wealthiest nations in Europe and indeed the world. According to figure 1, Dutch per capita GDP generally remained higher than those of Germany, France and well above the European average. At the end of 1970, per capita income was 22 per cent high in the Netherlands than in the rest of Europe, with the gap falling to just 9 per cent in the 1980s before and continued rise saw it grow to 21 per cent in 2011. In 2012 the Netherlands was ranked 10th on the Forbes Richest Countries list.

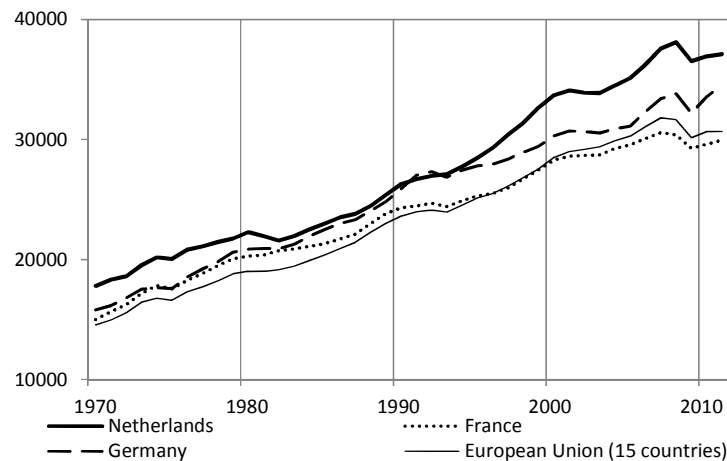


Figure 1: GDP per capita the Netherlands vs. Europe

Note: Per capita GDP is the constant PPP valued in US\$.

Data source: OECD *iLibrary*

The rising per capital income notwithstanding, gross fixed capital formation as a per cent of GDP has maintained a downward long-run trend since the 1970s portending grave implications for the economy (see figure 2). Traditionally strategic sectors like manufacturing and agriculture have lost footing in terms of their relative weights in the economy. As shown in figures 2 and 3, since the 1970s the respective contributions of manufacturing, agriculture and industrial sectors have fallen continually while the service and financial intermediation have gained increasing prominence in the Dutch economy as their percentage contribution to GDP maintained an upward long-run trend. The growing importance of the services and financial sector started way before 1970s, and as noted earlier, was accelerated by the growing strategy to internationalise Dutch based firms.

Within Europe, the Netherlands is one of the most open economies, and it is external sector oriented. Overall international trade and exports of goods and services have been growing continually with exports as the major driver of trade (see figure 4). Merchandise and services trade account for about two-thirds of GDP, generating substantial trade surplus. In 2011, total external trade of the Dutch economy was 157 per cent of GDP while exports amounted to 83 per cent GDP; a figure that is literally double the European average. According to Masselink and van den Noord (2009), the absolute amounts are even more revealing with the Netherlands as the third largest

exporter in terms of volume : after Germany and France. Thus, net foreign trade and particularly exports of goods and services remains important determinant of growth over the last thirty years. The European Union is the most important market for Dutch exports, receiving about 75 per cent of total export with Germany alone receiving about 25 per cent of all Dutch exports.

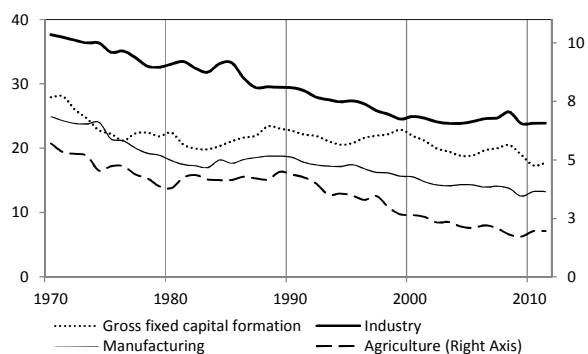


Figure 2: Declining Importance of Some Key Sectors in Dutch GDP (%)

Note: Figures for industry, manufacturing and agriculture sectors are value added per cent of GDP

Data source: World Development Indicators

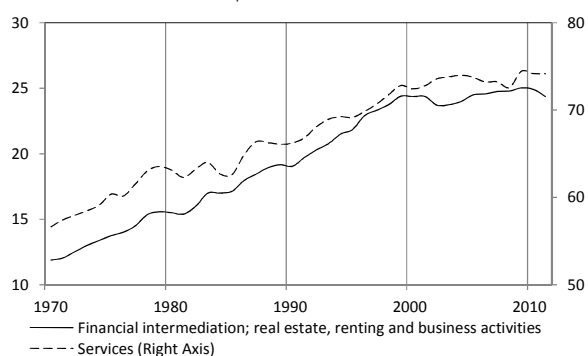


Figure 3: Rising Contribution of Services and Finance to Dutch GDP (%)

Note: Financial intermediation as per cent of GDP is extracted from the OECD *iLibrary*. Figure for services is value added per cent of GDP from the World Bank: World Development Indicators.

Data source: OECD *iLibrary* and World Development Indicators

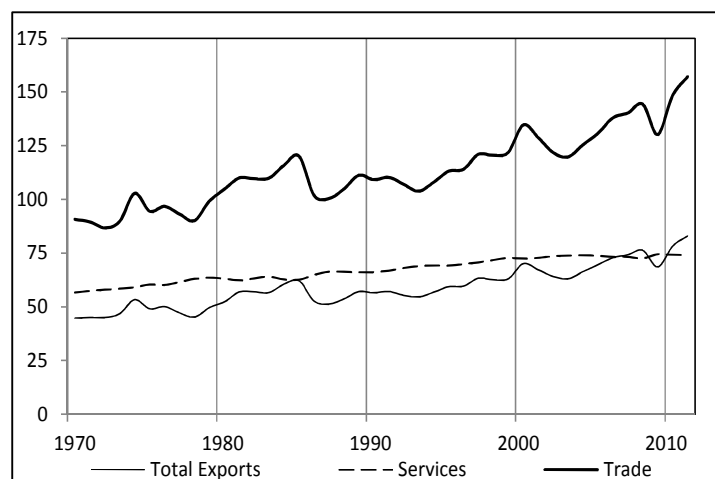


Figure 4: External Sector and Services Drive Dutch GDP (%)

Note: Total export is the exports of goods and services. Figure for services is value added per cent of GDP

Data source: World Development Indicators

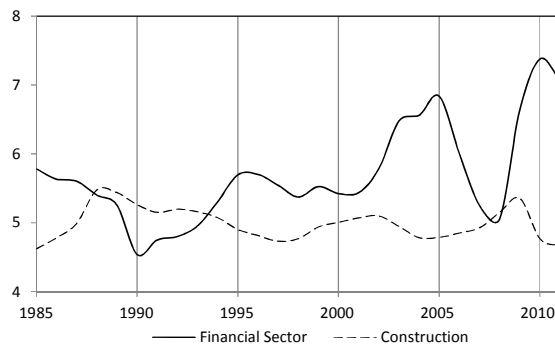


Figure 5: The Weight of Finance and Construction in Dutch GDP (%)

Note: Financial Sector here represents the percentage contributions of financial and insurance activities to GDP

Data source: OECD iLibrary

Relative to other European countries, the significant openness of the Dutch economy exposes the country to vagaries and uncertainties of world trade. The vulnerability crystallised somewhat in 2008-2009 when at the onset of the global financial and economic crisis world trade recorded negative annualised growth rates of 6 per cent in the last quarter of 2008, and 11 per cent in the first quarter of 2009. With this, after 27 unbroken years of continual expansion, the Dutch economy contracted by 3.7 per cent in 2009. Given the considerable dependence on international financial sector, the Dutch financial sector also suffered following the excessive exposure of some Dutch banks to mortgage-back securities from the USA. However, unlike other European economies such as Ireland, the adverse effect of the domestic real estate market was muted given the low weight of that industry in the overall Dutch economy (see figure 5). This implied that adverse consequences of international exposure of the financial sector on the Dutch economy was most likely due to importation of systemic risks (Masselink and van den Noord, 2009, DNB, 2009).

Parallel to historical evidence of financial crisis, the 2008 episode followed protracted period of economic growth accompanied by substantial expansion of domestic credit. With successive decades of economic prosperity, there was a rather erroneous yet widespread optimism among domestic agents that the problem of macroeconomic volatility has been surmounted permanently. This was founded on the extant institution of better stock management approaches by companies,

growing GDP weight of cyclically immune services like health care, increased transparency and stability of macroeconomic policies, better portfolio management and sufficient financial safeguards of companies and households (Masselink and van den Noord, 2009). The economy also enjoyed low levels of real interest rate – due mainly to savings surpluses in some Asian and oil rich countries – and low rates of inflation – which enabled the DNB to conduct pro-cyclical monetary policy in the face of continued economic expansion. Hence, with low interest rate and a pro-cyclical monetary policy domestic credit and economic growth maintained an upward long-run trend. As shown in figures 6 and 7, credit and GDP tended to move sympathetically; possessing a somewhat mutually reinforcing characteristic.

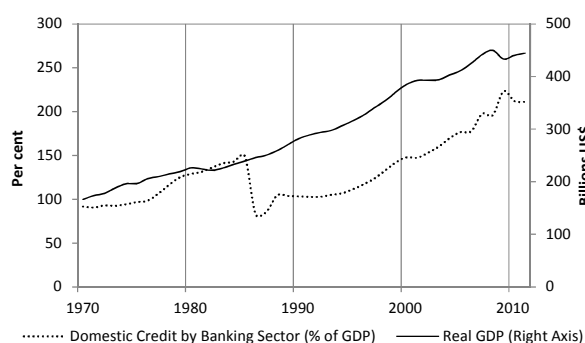


Figure 6: Domestic Banking System Credit and Dutch GDP

Data source: World Development Indicators

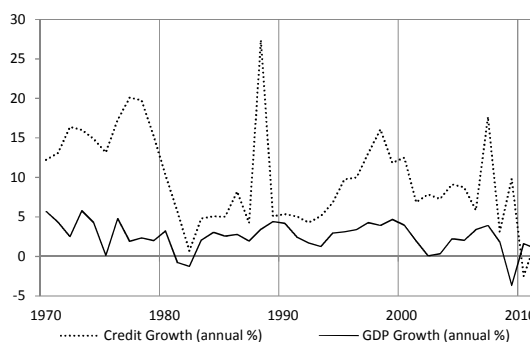


Figure 7: Annual Growth of Domestic Credit and GDP

Note: Credit growth here is the per cent year-on-year change in nominal net domestic credit denominated in local currency units (current LCU).

Data source: World Development Indicators

The acceleration of domestic credit in the pre-crisis years also reflected some problems of moral hazard as some so-called systemically important banks were deemed by the government and others as too big to fail. This was further compounded by poor corporate governance as banks used accounting rules and financial engineering to manipulate their books. Hence, healthy balance sheets were concocted by deceitfully incorporating gains from asset prices revaluations. As a whole, the non-transparency of banks with respect to impenetrably obtuse and extremely complex derivatives, an disproportionately generous and risk-free

bonuses system for top management of banks and the questionable activities of credit rating agencies conjointly fuelled excessive risky behaviour in the international financial markets to the Netherlands is strongly attached (Masselink and van den Noord, 2009).

The first indications of an imminent financial crisis emerged in mid-2007 within the financial system of the USA where derivatives and financial constructs were prevalent. Countless financial institutions had taken up a lot of these American securities making huge investments in very risky financial assets in the form of subprime mortgages. With rapidly rising default rates in the subprime mortgage market, trust within the banking sector declined sharply and suddenly, leading to considerable problems in the market for interbank loans. From then on not just the liquidity, but also the solvency of financial institutions was all of a sudden questioned. As a result, banks had to limit their credit supply and the global economy went into recession. With the corrosion of their capital, hitherto seemingly healthy Dutch banks suddenly became fragile necessitating government bailout. The Dutch government had to nationalise two banks (ABN Amro, Fortis) in 2008 while injecting billions of dollars to recapitalise other financial institutions; later in 2013 SNS was also nationalised.. The government also tried to stimulate the overall economy by accelerating infrastructure programmes, providing tax holidays and fostering export credit facilities. In 2010, these measures along with the effects of the recession lead to a budget deficit of 5.0 per cent of GDP as compared with a surplus of 0.5 per cent of GDP.

2. The Growth in Finance and Its Role in the Decades of Financialisation

In the past few decades, the operational strategy of the Dutch financial sector has been to internationalise. In order to enjoy the benefits of such venture, financial institutions need to be sufficiently large so as compete squarely with foreign and domestic counterpart. Hence, there have been a number of mega mergers in the Dutch financial industry to create mammoth, stable and robust financial institutions. The first of such saw the merging of the largest four banks in 1964 into two mega

banks: ABN and AMRO. This was followed by the emergence of Robabank in a 1972 merger of two cooperative banks. Since then the financial sector has experienced several mergers both intra and inter banking/insurance firms. In 1983, insurance firms AGO and ENNIA merged to form AEGON while the NMB-Postbank was emerged in 1989. ABN and AMRO, two of the largest financial institutions merged in 1990 to become ABN-AMRO whereas NMB-Postbank underwent further transformation when it combined with the insurance company Nationale-Nederlanden to form the ING Group. Accordingly, some of the foremost financial corporations in the Netherlands – ABN-AMRO, ING, Rabobank and AEGON – were created from mergers.

A significant aspect of the Dutch process of internationalization was the banking consortia, which in the 1960s and 1970s developed into an essential avenue of establishing presence overseas (Westerhuis, 2008). This enabled some Dutch-based financial institutions to combine with others in Europe so as to effectively conduct financial operation that required prohibitive capital outlay. Consequently, the European Banks' International Company (EBIC) was set up in 1970 from the collaboration of four European banks, including the erstwhile AMRO bank. Among the key objectives of this syndicate was the creation of a global network of EBIC branches. Similarly, the erstwhile ABN Bank joined the ABECOR consortium in 1973 that was less ambitious vis-à-vis EBIC with respect to establishing foreign subsidiaries. Rabobank, in 1977, became a member of another prominent banking consortium the Unico Banking Group made up of European cooperative banks. However, with the exception of the Unico Banking Group which is still in existence, all others collapsed in the 1980s.

With the domestic mergers and international syndications, banks were able to undertake larger operations. As a consequence, between 1970 and 1980 net domestic credit expanded rapidly at an average annual rate of 15.3 per cent with a peak of 20.1 per cent in 1977 (see figure 7). For the first time, domestic credit by banking sector surpassed GDP during this decennium, standing at 106.5 per cent

and 128.9 per cent of GDP in 1977 and 1980, respectively (see figure 6). Over the next three decades, domestic credit maintained an upward trend, albeit at a slower pace, recording decennial averages of 7.2 per cent, 9.5 per cent, and 7.4 per cent, during the respective periods 1981-1990, 1991-2000, and 2001-2010. In 2011 following the financial crisis, year-on-year credit growth was a mere 1.8 per cent having rallied from a decline of 2.5 per cent in the preceding year. Figure 7 further suggests that the expansion of domestic credit accelerates over the decades as peaks occurred in 1977, 1988, 1998 and 2007. While the 1977 peak coincided with the activities of financial consortia that was prevalent at that time, that of 1988 may be attributed to the re-launch of the debate on Economic and Monetary Union (EMU) at the Hannover Summit in June 1988 and the subsequent inauguration of the Delors Committee. Based on the Delors Report, all restrictions on the movement of capital between Member States were, in principle, abolished in July 1990. The European Central Bank (ECB) was established in June 1998 to herald the adoption of euro currency thereby granting financial institutions further access to international markets – with the effective elimination of exchange rate and a permanent decline in interest rate. This drove domestic credit upwards until another peak in 2007 preceding the global financial crisis. Hence, following an initial dip in the 1986, the ratio of domestic banking sector credit to overall GDP grew continually from 104.5 per cent in 1988 to 223.3 per cent in 2009, standing at 211.1 per cent in 2011.

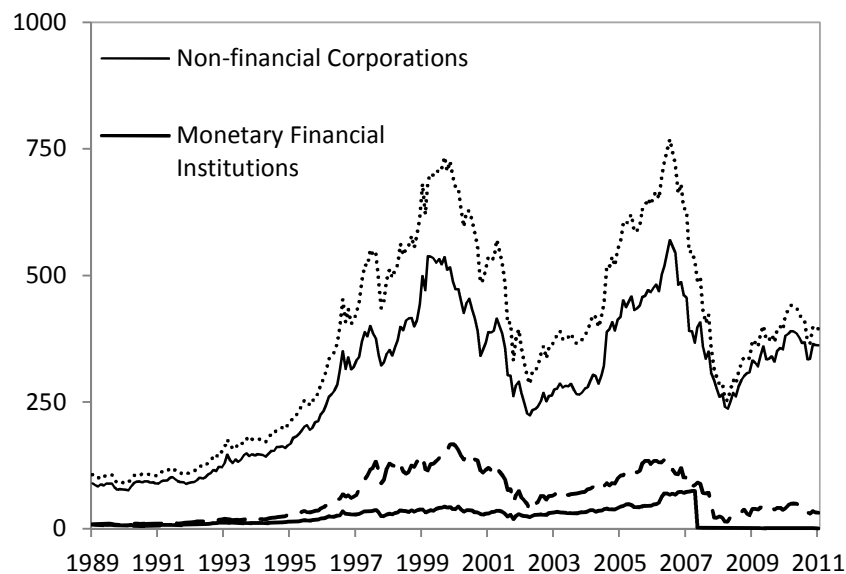
The drive to integrate with the rest of Europe was, among other reasons, to foster the cross-border flow of economic and financial resource which would benefit Dutch agents enormously. Banks and other monetary financial institutions benefited significantly with the Dutch accession to the European monetary union as they were able to access larger quantum of international finance at lower interest rates, for onward investment in other foreign-based financial products and derivatives. However, the series of cross-border integration and syndication is not limited to the government, banks or insurance firms alone but also to the Dutch capital market. In order to avert competitive disadvantage, the Amsterdam Stock Exchange merged

with some other European stock markets. In September 2000, the Amsterdam Stock Exchange integrated its activities with the Brussels Stock Exchange and the Paris Stock Exchange to form Euronext, and is now known as Euronext Amsterdam. The Dutch capital market is now operated by Euronext Amsterdam as fully owned subsidiary of Euronext NV, which runs Eurolist and Liffe Connect. Eurolist is a cash market (that integrates the markets of Brussels, Paris, the Netherlands, and Lisbon into a single market with the same rules for access as well as listing requirements) while Liffe Connect is a regulated market for derivatives (IMF, 2011). Starting in 2010 Eurolist further incorporates a cash market from London through the London gateway.

Before ratification of this cross-border stock exchange merger, the Dutch equity market was experiencing substantial growth. Between 1985 and 2000, the total amount of quoted shares outstanding ascended having sextupled from 106,563 million euros in December 1989 to 734,379 million euros in August 2000 (see figure 8). The growth accelerated during the latter part of the 1990s as the EMU members states were setting up infrastructures and finalising the arrangement towards the adoption of the euro. Initially, following the stock exchange mergers the number of outstanding shares in fell sharply perhaps due to the consolidation of shares that may have hitherto been quoted concurrently in individual exchanges. However, the quantum rallied in March 2003 from 285,953 million euros to 769,131 million in June 2007 just before the onset of the financial after which it crashed standing at just 395,098 million in December 2011.

Non-financial corporations account for the lion share of the activities in the Dutch capital market (See figure 9). On the average, these companies accounted for about 75 per cent of the total amount of shares outstanding at the equity market, indicative of the marginal size of the Dutch financial sector in the economy. However, between 1997 and 2008, the shares of financial organisations accounted for more than 25 per cent of the total outstanding amount. This was largely due to the overriding effects of the activities of insurance corporations, pension funds, financial auxiliaries and other

financial intermediaries. Among financial institutions, these firms dominated monetary financial institutions (MFIs) accounting for more than 60 per cent of the sectors shares outstanding until 2008 when the figure rose to about 95 per cent (see figure 10). The decline of number of MFI shares outstanding may not be unconnected to the effect of the financial crises on major MFIs and the nationalisation of key institutions.



**Figure 8: Dutch Equity Market
 (Amount of Quoted Shares Outstanding: billions of euros)**

Note: Other financial corporations include insurance corporations, pension funds, financial auxiliaries and other financial intermediaries.

Data Source: Eurostat

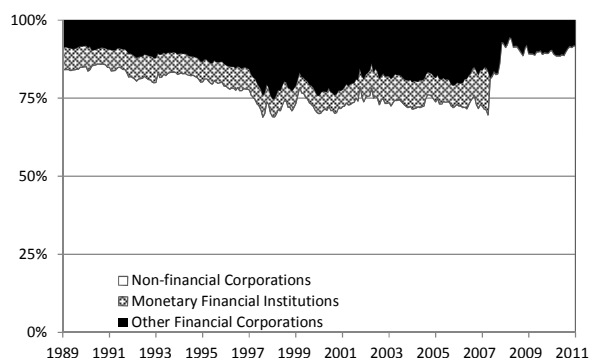


Figure 9: Percentage Distribution of Quoted Shares

Note: Other financial corporations include insurance corporations,

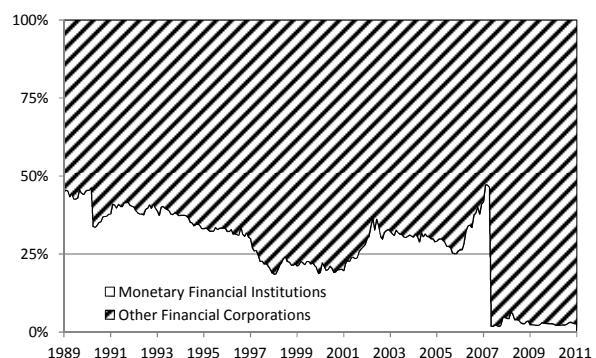


Figure 10: Percentage Distribution of Quoted Shares of Financial Corporations

Note: Other financial corporations include insurance corporations,

The peculiar nature of the Dutch capital can be attributed to the listings on the stock exchange, with only a handful of companies been publicly quoted. Most new listings in Euronext take place in the Paris segment. As at October 2010, a total of 115 firms were listed in Euronext Amsterdam with combined market capitalisation of €462.71 billion (IMF, 2011). This market is highly concentrated with approximately 74 per cent of total market capitalisation due to the top 10 companies. Capitalisation of the Dutch capital market has, over the past one and a half decades, contracted marginally; maintaining a relatively flat long-run slope. Prior the formation of the Euronext Amsterdam in September 2000, market capitalisation at the Amsterdam Stock Exchange grew continually from €107.54 billion in January 1991 to €426.51 billion in December 1997 and €745.23 billion in August 2000 (see figure 11). However, following the stock exchange merger the figure declined steadily to €426.60 billion in February 2003 before recovering to a pre-crisis peak of €698.83 billion in December 2007. During the crisis, as firms became insolvent, market capitalisation at the Euronext Amsterdam lost more than half its value within twelve months, finishing at €264.81 billion in December 2008 before rallying to €502.52 billion in December 2010. In relative terms, the Dutch stock market capitalisation of is among the highest in the Eurozone. Nonetheless, the amounts of transactions through the Euronext Amsterdam (and the erstwhile Amsterdam Stock Exchange) are comparatively small. This is largely because key internationalised banks under the universal banking system double as stockbrokers/market-makers rely on their internal trading systems and only resort to the stock exchange to trade their resulting net positions (IMF, 2004).

Overall, the financial sector has made with an average contribution of 5.7 per cent to overall GDP of the Netherlands between 1985 and 2011. The share of the sector in total GDP rose continually from 4.5 per cent in 1990 to 6.8 per cent in 2005. At the onset of the crisis, however, it declined to 5.1 per cent in 2008 before recovering to

7.4 per cent in 2010. The long-run upward trend depicted in figure 5 is suggestive of rising financialisation of the Dutch economy. However, the role of the domestic financial and securities market is relatively limited (IMF, 2004). The Dutch financial institutions rely on Eurozone-wide interbank, repo and forex markets for financing liquidity which due to the eliminated currency risks within the Eurozone has improved the depth and liquidity of funding instruments. Besides, Dutch government and corporate bond market are also integrated into the Euro-wide markets: market participants are generally satisfied with the overall size and liquidity of the former, while the latter, though still relatively small, has been growing fast.

3. The structure of the financial sector by forms of organisation

The financial system of the Netherlands consists mainly of three sectors – banking, pensions, and insurance. The banking sector represents the core of the financial system with a total assets equivalent to 382 per cent of GDP in 2010 with the second most important sector being the pension system whose assets under management stood at 135 per cent of GDP. Although the pensions sector has 545 registered pension schemes, the two largest and ten largest funds manage 44 and 78 per cent of scheme assets, respectively. The insurance sector holds assets equal to 69 per cent of GDP, with life insurance assets representing 89 per cent of the sector. As at November 2010 a total of 49 banks and 263 investment firms are licenced undertake investment services in the securities markets with about 90 per cent of the investment firms dedicated to asset management. (IMF, 2011).

Generally, the Dutch financial sector can be classified into monetary and non-monetary financial institutions. The former – engaged in some form of financial intermediary and credit creation – includes the central bank, money market funds and credit institutions. Non-monetary financial institutions are essentially investment outlets and/or institutional investors including the capital market, insurance and pensions companies. Aside the DNB – the Dutch central bank – the most important financial institutions in the Netherlands include ABN-AMRO, AEGON, FORTIS, ING, and Rabobank. As at 1998 the total number of monetary financial

institutions (MFIs) stood at 668. Over the years, however, the number of existing and licenced MFIs has declined steadily, falling to 297 in 2011 (see table 1). The fall is not limited to any particular type of institution as it affected both credit institutions and money market funds. However, relative to credit institutions money market funds have fared less well in terms of number. For instance in 1998 there were 23 credit institutions per money market fund; a ratio that changed to 70:1 and 41:1 in 2001 and 2011, respectively. Of the 287 credit institutions present in the Netherlands in 2011, 250 are locally licenced. These have a total of 2,690 branches locally and 37 branches abroad. A total of 37 foreign-based credit institutions were present in 2011, 25 of which are registered in other Eurozone countries, 10 are EEA-based and 2 are non-EEA based. Dutch credit institutions own 25 subsidiaries abroad: 10 within the EU and 15 outside the EU.

The Dutch banking system, dominant in the financial sector, participate in a number of key markets and business lines: retail banking (for individuals and small firms/enterprises), corporate banking (for mid and large firms), and capital markets and investment banking (CMIB) dealings. Retail banking is responsible for almost 50 per cent (around €13.0 billion in 2007) of aggregate banking system revenue, while corporate banking market, with a 2007 revenue of approximately €9.5 billion, constitutes nearly 35 per cent of market revenue (DNB, 2009). Instead of just the traditional lending business usually undertaken at low margins, corporate banking divisions of Dutch banks typically engage in the practice of cross-selling multiple and complex products (including cash management, specialised finance and capital market products) to the same clients in order to ensure profitability. Generally, the CMIB business line is very complex, extremely risky and highly sensitive to business cycle. In 2007, due essentially to considerable amount of mergers and acquisitions, its revenue was about €5.0 billion compared with €3.6 billion in 2006 (DNB, 2009). A key success prerequisite in this segment is a robust balance sheet – supported by solvency and liquidity adequacy – empowering them to bankroll big transactions. The Dutch CMIB markets accommodate global players, regional players, national

players and boutiques with the global players responsible for approximately half of the segment's revenues. Compared to key global investment banks with asset base close to €1.0 trillion, CMIB divisions of Dutch banks are 80 per cent smaller and have continued to lose market share to global players over the years (DNB, 2009).

Table 1: The Structure of the Financial System in the Netherlands

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. of MFIs in the Netherlands	n.a.	668	649	620	574	552	493	472	411	355	351	312	305	300	297
- Central Bank	n.a.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Money Market Funds	n.a.	28	29	29	8	8	7	7	7	7	7	7	7	7	7
- Credit Institutions	n.a.	634	615	586	561	539	481	461	401	345	341	302	295	290	287
• Locally-licensed	n.a.	n.a.	596	564	529	518	471	456	396	313	305	266	262	254	250
• Foreign-licensed	n.a.	n.a.	19	22	32	21	10	5	5	32	36	36	33	36	37
- Other Financial Inst.	n.a.	5	4	4	4	4	4	3	2	2	2	2	2	2	2
Branches of Dutch CIs	6800	6808	5519	5179	4748	4297	3911	3827	3776	3477	3637	3456	3169	2897	2690
- In the Netherlands	6800	6787	5493	5151	4720	4269	3883	3798	3748	3456	3604	3421	3137	2864	2653
- Within EU	n.a.	10	16	18	19	19	20	22	22	16	28	30	27	28	32
- Outside EU	n.a.	11	10	10	9	9	8	7	6	5	5	5	5	5	5
Branches of Foreign CIs in the Netherlands	n.a.	n.a.	20	22	32	21	10	5	5	32	36	36	33	36	37
- Eurozone-based	n.a.	n.a.	19	15	16	7	2	1	1	23	25	25	22	24	25
- EEA-based (non-Eurozone)	n.a.	n.a.	0	7	7	5	2	1	1	7	9	9	9	10	10
- Non-EEA based	n.a.	n.a.	1	0	9	9	6	3	3	2	2	2	2	2	2
Subsidiaries of Dutch CIs	n.a.	29	26	28	31	31	29	28	28	28	25	25	25	24	25
- European Union	n.a.	10	9	12	14	14	13	12	12	12	11	10	11	9	10
- Outside EU	n.a.	19	17	16	17	17	16	16	16	16	14	15	14	15	15
No. of Employees in the Netherlands ('000)	111	119	124	129	131	126	121	118	120	117	114	116	110	108	105
Total Assets (€ Bn)															
- MFIs	769	896	984	1149	1266	1356	1476	1678	1698	1843	2168	2232	2217	2261	2427
- Insurance Corp.	156	215	244	250	297	284	294	316	345	332	361	357	369	406	438
- Pension Funds	309	366	436	445	451	423	475	522	622	696	763	697	743	801	871
Index of Competition (%)															
- Top 5 Concentration	79.4	81.7	82.3	81.1	82.5	82.7	84.2	84.0	84.5	85.1	86.3	86.8	85.0	84.4	83.6
- Herfindahl Index	16.5	18.0	17.0	16.9	17.6	17.9	17.4	17.3	17.9	18.2	19.3	21.7	20.3	20.5	20.6

Source: ECB Statistical Data Warehouse

Note: 1/ Credit Institutions are as defined in the Community Law

2/ MFI means Monetary Financial Institutions

3/ Competition index is based on Total Asset

The Dutch banking sector operates a universal banking system enabling banks to dabble both into money and capital market activities. This among other facilitated the ability banking to overshadow other aspects of the financial sector. Comparing the banking system with the capital market, the Dutch financial system at present, can be described as a bank-based system. Although, the stock market is considered one the most capitalised in Europe, the market is smaller when compared to the banking system. Before the cross-border stock market merger involving the Amsterdam Stock Exchange, the Dutch capital market maintained one-to-one ratio with the banking system on the average. Between December 1997 and August 2000, the capital market constituted between 81 per cent and 113 per cent of banking system. Right before the merger, the market capitalisation was expanding fast and

was 10 per cent larger than total MFI credits (see figure 11). However, while credits by MFIs have grown steadily market capitalisation has fallen in the long-run. Hence, the credit-to-market ratio showed a gentle but consistent rise before the financial crisis. During the immediate pre-crisis years the banking system was approximately twice the size of the capital market. At the onset of the crisis, market capitalisation fell sharply following the sharp drop in equity prices and the consequent decline in the valuation of quoted firms. The continued expansion of credit at that time ensured that size of MFI credits almost quintupled the total market capitalisation at the Euronext Amsterdam. Although, a number of benign outcomes based on government actions and global developments saw credit slowdown and stock market recovery, the figures are significantly different from the pre-crisis levels so that the banking system remains significantly larger than the capital market.

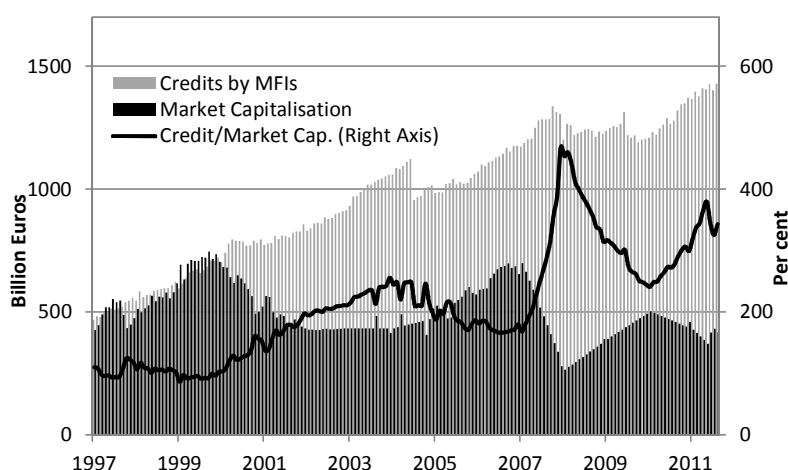


Figure 10: Structure of the Dutch Credit Market

Note: Credit by MFIs is the non-consolidated credit to total residents granted by monetary financial institutions. Market Capitalisation data up to 2006 are monthly series from the Eurostat while the data from 2007 are annual series from the World Bank: World Development Indicators which were disaggregated using linear projection.

Data Source: ECB Statistical Data Warehouse, Eurostat, World Development Indicators, and authors' estimates

Over the years, MFI credits and deposits have expanded gradually. In the ten year between 1997 and 2007 total debt assets more than doubled from €518 billion to €1,306 billion. By end-2012, this figure has recorded an additional 5.3 per cent growth to reach €1,375 billion. MFI deposits followed a similar trend, more than

doubling from €439 billion in 1997 to €1,012 billion in 2007 before rising by 5.4 per cent to €1,066 in 2012. Figures 12 to 15 indicate that the structure of both MFIs' loans and deposits was driven largely by households and non-financial corporations which jointly account for more than 60 per cent of bank activities on the average. Patronage by insurance corporations, pension funds and government were negligible to MFI operations, jointly accounting for less than 10 per cent of all loans and deposits on the average.

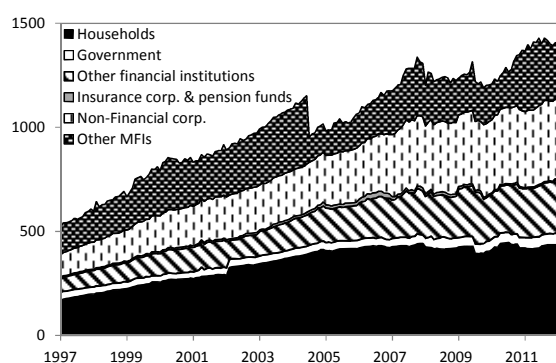


Figure 11: Composition of Loans of Dutch MFIs (€ Bn)

Note: Household loans here represent claims on households plus claims on non-profit institutions serving households. The contribution of insurance corporations plus pension funds is so little such that it is not easily visible in the chart.

Data Source: ECB Statistical Data Warehouse

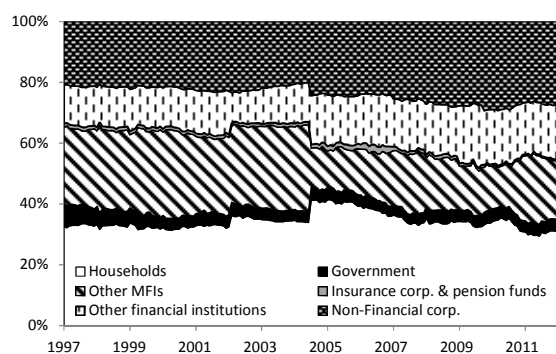


Figure 13: Percentage Holding of Dutch MFIs Loans

Note: Household loans here represent claims on households plus claims on non-profit institutions serving households. The contribution of insurance corporations plus pension funds is so little, at about 4%, such that it is not visible in the chart.

Data Source: ECB Statistical Data Warehouse

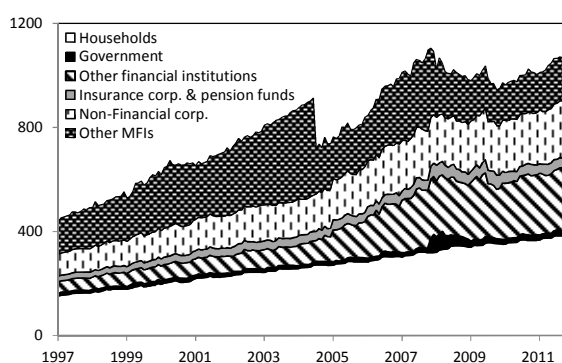


Figure 12: Composition of Deposits of Dutch MFIs (€ Bn)

Note: Household deposits here represent deposits of households plus those of non-profit institutions serving households. Government deposits are the sum of deposits of "central government" and "other general government".

Data Source: ECB Statistical Data Warehouse

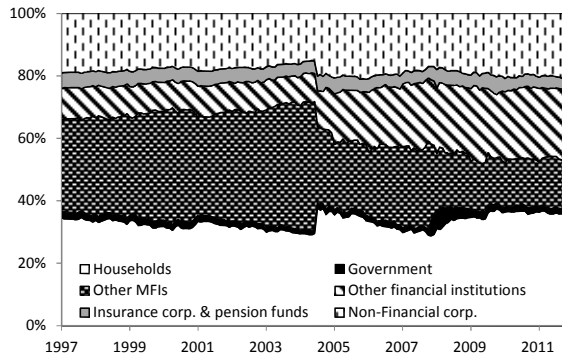


Figure 14: Percentage Holding of Dutch MFIs Loans

Note: Household deposits here represent deposits of households plus those of non-profit institutions serving households. Government deposits are the sum of deposits of "central government" and "other general government". The weight of total government deposit in overall deposit liabilities is however negligible.

Data Source: ECB Statistical Data Warehouse

Given the emergence of the sector as the most source and use of MFIs' funds, the structure of deposits and loans would suggest a stable and base for banks. However, the Dutch financial system depends substantially on the external sector for its dealings. For instance, mid- and large corporates are increasingly served by foreign

banks, both for domestic and foreign needs (DNB, 2009). Similarly, Dutch banks source a good amount of their deposits from foreigners and extend an increasing amount credit to overseas residents. Figure 16 indicate a continued rise both in the amount of external assets and external liabilities of MFIs, both of which grew from approximately €130 billion in 1997 to over €500 billion in the pre-crisis years. A closer look at the data however suggests that Dutch banks are net borrowers abroad as external liabilities tended to always surpass external assets. Relative to the total balance sheet, both external assets and liabilities constituted about a quarter of its size in the immediate pre-crisis period. This significant dependence on the overseas agents exposes the Dutch financial system to enormous contagion risk, which eventually crystallised during the financial crisis.

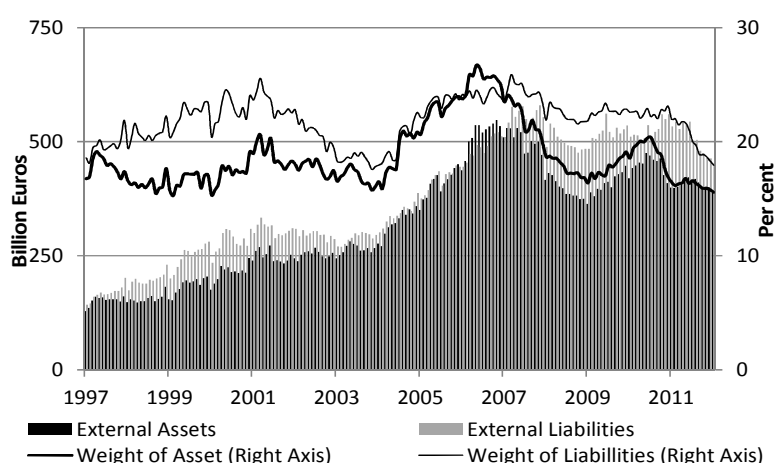


Figure 15: Importance of External Finance

Note: Data for external liabilities are from Eurostat database while external assets are extracted from the ECB Statistical Data Warehouse. Weight measures the percentage contributions of external assets and external liabilities, respectively, to MFIs' balance sheet.

Data Source: Eurostat and ECB Statistical Data Warehouse

Prior to the financial crisis, foreign users received more loans from Dutch MFIs than to domestic users. As a percentage of GDP, total claims of Dutch banking sector on foreign residents stood at over 300 per cent in 2007, more than twice the European average of 135 per cent, and the highest among all EU countries (Masselink and van den Noord, 2009). Most of the external transactions were with the USA over which Dutch banks holds claimed valued at 66 per cent of GDP compared to an average European exposure to the USA market of less than 30 per cent in 2007. Dutch banks

were also vulnerable to Eastern European countries up to 11 per cent of GDP, especially vis-à-vis the average European exposure of 8 per cent (Masselink and van den Noord, 2009). Hence, the dependence of the Dutch financial sector was generally above European average in every respect. In 2009, there was a switch as loan exposures became somewhat equally distributed between domestic and foreign agents (mostly advanced countries), indicating increased shifts a shift towards the domestic market. Aside the huge investment in USA mortgage securities, sovereign instruments comprise nearly 13 per cent of all (on and off) balance sheet exposures on average. Composition of banking system liabilities, in 2010, indicated that deposits comprised 43 per cent, external liabilities 23 per cent, and issued debt securities accounted for 20 per cent (IMF, 2011).

Between 1998 and 2012, MFIs' external liabilities and assets grew on the average by 9.4 per cent and 8.4 per cent respectively, (see figures 18 and 19). A couple of years to the financial crisis, both deposits and claims of banks to domestic residents recorded a sharp negative growth. Banks thus compensated this by an aggressive growth of cross-border transactions. This enabled them to maintain large balance sheet even in the face of falling domestic market. At the onset of the crisis, with the recovery of domestic market reinforcing the external business, MFI deposits liabilities and credits experienced a surge in annual growth of about 30 per cent. These, however, decelerated sharply during the crisis due to a cocktail of factors including the devaluation of USA-back mortgage securities devalued, banks deleveraging, and a tight market (following the effect of wealth decumulation on domestic and foreign savings).

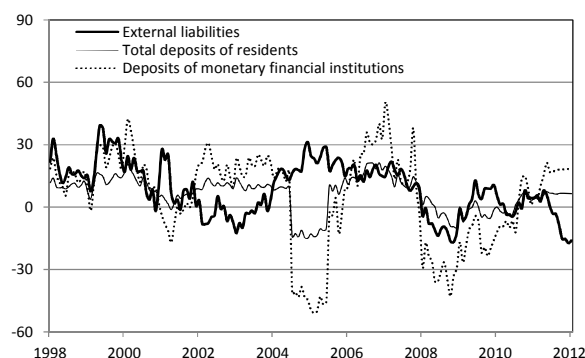


Figure 16: Growth of Deposits by Sources (%)

Note: Figures are annualised growth rates i.e. percentage change compared to corresponding period of the previous year. Total deposits of residents is the non-consolidated deposits of Dutch residents held by Dutch monetary financial institutions.

Data Source: Eurostat

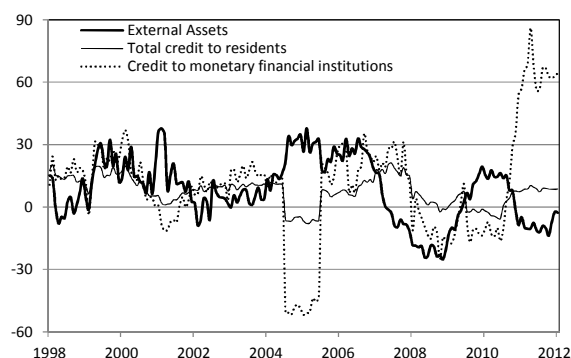


Figure 17: Credit Growth by Recipients (%)

Note: Figures are annualised growth rates i.e. percentage change compared to corresponding period of the previous year. Total credit to residents is the non-consolidated claims of Dutch monetary financial institutions on Dutch residents.

Data Source: Eurostat and ECB Statistical Data Warehouse

Besides excessive exposure to the external sector, the vulnerability of the Dutch MFIs is also visible in the nature of their deposit liabilities. Over the years, these institutions have tended to rely on innately unstable types, with most deposits having no agreed length of tenure (see figures 19 and 20). On the average, more than 70 per cent of deposit liabilities are untenured. These untenured can be called and withdrawn from the MFIs suddenly and without warning; hence, implying a potential source of huge volatility to banks' operations. Only about 30 per cent of banks deposit liability are stable with agreed maturities which means that banks are only able to plan effectively based on the stable proportion and would only rely on forecast and expectation for the 70 per cent that are potentially volatile. This leaves room for enormous credit risk with banks borrowing short and lending long (to households for mortgages and buying mortgage-based securities from the USA). In terms of composition, most of the tenured deposits are due to financial institutions with insurance and pensions plus other financial institutions accounting for over 60 per cent of deposits (see figures 21 and 22). Again these are institutional servers who may pull out large amounts of deposits for financial investments. Domestic household, usually deemed the most stable source of deposits, are responsible for only about 15 per cent of deposits with agree maturity in the Netherlands

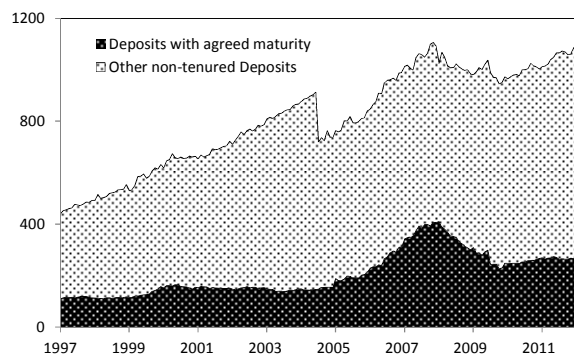


Figure 18: Tenured versus Untenured Deposits (€ Bn)

Note: Other non-tenured deposits are computed as total deposits minus deposits with agreed maturity.

Data Source: ECB Statistical Data Warehouse

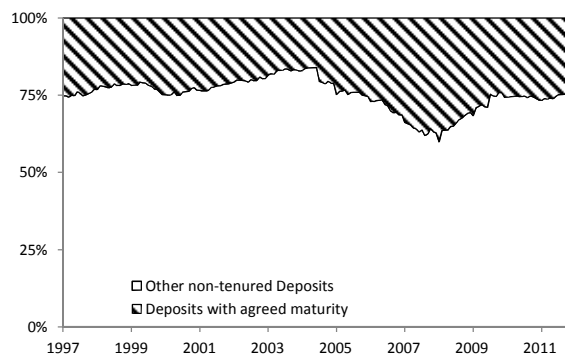


Figure 19: Percentage Distribution of Tenured and Untenured Deposits

Note: Other non-tenured deposits are computed as total deposits minus deposits with agreed maturity.

Data Source: ECB Statistical Data Warehouse

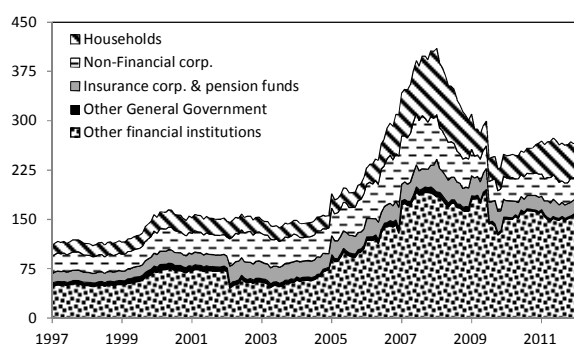


Figure 20: Composition of Tenured Deposits for Dutch MFIs (€ Bn)

Note: Households here represents deposits liabilities of households and non-profit institutions serving households.

Data Source: ECB Statistical Data Warehouse

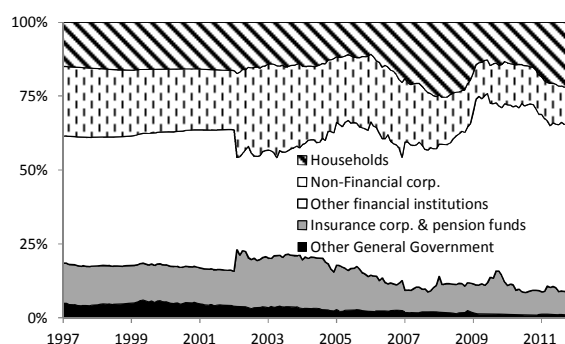


Figure 21: Percentage Distribution of Tenured Deposits

Note: Households here represents deposits liabilities of households and non-profit institutions serving households.

Data Source: ECB Statistical Data Warehouse

4. The Nature and Degree of Competition between Financial Institutions

The Netherlands is among the most advanced countries in the EU both financially and economically, and hosts some of the world's leading financial institutions. ABN-AMRO, one of the foremost MFIs in the Netherlands was ranked 22nd largest bank globally in terms of market capitalisation, as of 31st May 1999 (Larson et al., 2011). Domestically, four institutions – ABN-AMRO, ING, Rabobank and SNS – constitute the largest banks. Due to their large size relative to other domestic MFIs, these are deemed as systemically important financial institutions (SIFIs). Most SIFIs are large universal banks which offer a wide variety of banking services while specialised banks like Van Lanschot and Mees Pierson offer private banking services for a wealthy clientele.

As mentioned earlier, MFIs (including the banking sector) are the most important institutions within the Dutch financial system surpassing pension funds and insurance corporations. As seen in table 1, in terms of total assets MFIs are considerably larger than those of pensions and insurance firms. Between 1997 and 2011, the assets of all three types increased approximately three-folds, with MFIs' expanding fastest. Over this period, total assets of MFIs, on average, accounted for over 64 per cent of industry total with pensions and insurance having 23 per cent and nearly 13 per cent, respectively (see table 2). This implied, from table 3, that MFI assets were five times the size of total assets of insurance corporations and tripled the assets of the pension funds on average.

A cursory look at the trends indicates that MFIs stronghold of the industry has increased over the years. At the end of 1997, MFIs assets represented 62 per cent of the industry total, increasing to 68 per cent in 2008 before dropping to 65 per cent in 2011. For pensions and insurance firms, the figure declined from 25 per cent and 13 per cent, respectively, in 1997 to 23 per cent and 13 per cent in 2011. These implied that in 1997 MFI assets were quintuple and double the size of pensions and insurance firms' assets respectively but by 2011 MFIs have grown their asset base to sextuple and triple those of the other two institutions. This indicates declining competition between MFIs and other components of the financial sector with the former becoming increasingly concentrated. Hence, Dutch MFIs are becoming too strong for pension funds and insurance corporations. This is traceable, among other factors, to the internationalisation and regional integration in Europe which lowered interest rates permanently. As institutional investors, pensions and insurance firms rely on interest income for their pay-out and their profits. According to the IMF (2011, p.6), "insurance companies are suffering from a saturated market compounded by low economic growth and low interest rates. With the loss of tax advantage, they are confronting growing competition from banks and asset managers." Similarly, low interest rates and extended life expectancy put pension funds under financial stress, corroding their competitiveness.

Table 2: Percentage Composition of Financial Sector Assets

	1997	2000	2005	2006	2007	2008	2009	2010	2011	Average
Total Assets (€ Bn)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
- MFIs	62%	62%	64%	64%	66%	68%	67%	65%	65%	64%
- Insurance Corp.	13%	14%	13%	12%	11%	11%	11%	12%	12%	13%
- Pension Funds	25%	24%	23%	24%	23%	21%	22%	23%	23%	23%

Source: Computed from Table 1

Note: Average here is for contiguous years from 1997 to 2011 including those years suppressed for space management.

Table 3: Ratio of MFI Assets to Assets of Pension and Insurance Corporations

	1997	2000	2005	2006	2007	2008	2009	2010	2011	Average
<i>MFIs</i>	1	1	1	1	1	1	1	1	1	1
<i>Insurance Corp.</i>	5	5	5	6	6	6	6	6	6	5
<i>Pension Funds</i>	2	3	3	3	3	3	3	3	3	3

Source: Computed from Table 1

Note: Average here is for contiguous years from 1997 to 2011 including those years suppressed for space management.

While MFIs dominate other institutions in the Dutch financial industry, the banking system is itself highly concentrated. Table 1 indicate that the top five MFIs account for over 80 per cent of the sectors total assets. The top-five concentration ratio (CR-5) and the Herfindahl Hirschman Index (HHI) both indicated that the market is highly concentrated. Generally, markets in which the HHI is between 10.0 per cent and 18.0 per cent are deemed moderately concentrated while those with HHI above 18.0 per cent regarded as highly concentrated. Between 1997 and the 2011, the average HHI stood at 18.5 per cent with the HHI exceeding 18.0 per cent since 2006. Figure 24 indicates that market concentration has not only been high, it has also been rising over the years. CR-5 increased from 79.4 per cent in 1997 to 86.8 per cent in 2006 before declining marginally to 83.6 per cent in 2011. Similarly, the HHI rose from 16.5 per cent in 1997 to 21.7 per cent in 2008 before failing slightly to 20.6 per cent in 2011. The decline since 2008 reflects the overriding impact of the financial crisis on the banking sector which resulted in the nationalisation of ABN-AMRO. Nonetheless, both measures showed an upward long-run trend, indicating an overall diminishing competitiveness within the Dutch banking industry. Segmenting the industry into various markets showed that competition is higher in some than in others. For instance, the mortgage market is fairly competitive with HHI of 14.6 per cent while the savings market with HHI of 23.6 per cent is highly concentrated (DNB, 2009).

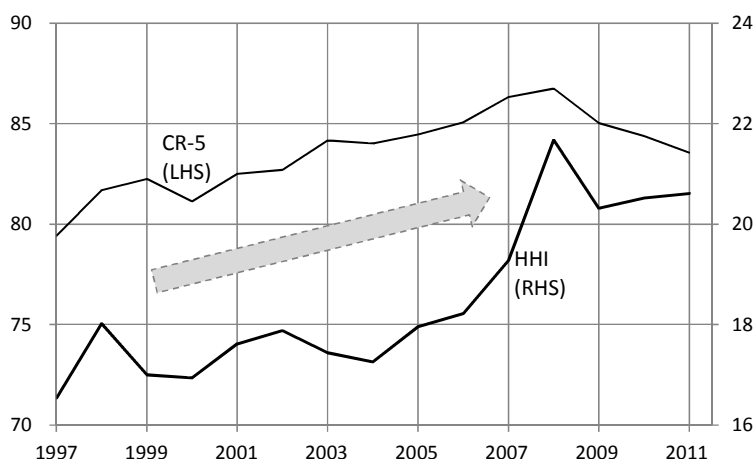


Figure 21: Rising Concentration in the Dutch Financial Sector

Note: Herfindahl index (HHI) is multiplied by 100

Data source: ECB Statistical Data Warehouse

Despite high market concentration of the overall banking sector, the Dutch retail banking market – characterised by lower cost as well as lower revenue margins than the European average – is fairly competitive. According to the DNB (2009), the competitive nature of retail banking market is attributable to the effect of new entrants, the relatively simple and transparent products on offer, and the rising popularity of internet banking – with over three quarters of the Dutch population make use of internet banking at least once per quarter. Although low costs and revenue margin could be indicative of market competition, they could also be due to other factors – like the cost reducing effect of high population density (which increases the branch efficiency) and the revenue moderation due to loss making payment products (DNB, 2009). Therefore, the low costs and revenue margin of the Dutch banking industry is at best suggestive of competition rather than being the underlying cause.

The retail banking market deals essentially with the financial needs of households, which constitute a significant share of MFIs' deposits and lending in the Netherlands. Dutch households are heavily dependent on bank loans and have one the highest debt burden in the EU. In 2007, total indebtedness of Dutch households was nearly 120 per cent of GDP, compared with 64 per cent in Germany, 49 per cent in France

and 47 per cent in Belgium and was second only to Denmark with 128 per cent of GDP (Masselink and van den Noord, 2009). The liabilities of Dutch households, however, are overwhelmingly long-term, limiting exposure to liquidity risk (IMF, 2011). These debts are mostly in the form of mortgage, fuelled by generous mortgage interest deductibility (MID), persistently low unemployment, rising per capita (disposable) income and house price inflation in the pre-crisis period.

Between 2000 and 2008, house prices recorded an average annualised growth rate of 6 per cent, before experiencing a 5 per cent deflation in 2009 and stabilised in 2010 (IMF, 2011). Sustained house price inflation, over the years, encouraged banks to scramble for patronage and to offer loans with high loan-to-value (LTV) ratios in the process. In 2000, average LTV ratio for new mortgages was approximately 100 per cent but rose to 110 per cent in 2005 (see figure 25). Over the next five years, banks became increasingly reckless as LTV rose continually. By 2010 LTV has increased by an additional 10 percentage points to 120 per cent. This was significantly over prudential norms that existed in most countries and heightened banks' vulnerability considerably. Accordingly, banks over-traded in the domestic market relative to their deposit liabilities. The funding gap – the difference between banks' lending and deposits – climbed consistently quadrupling in absolute figures from €89.6 billion in December 1997 to €383.1 billion in January 2012 (see figure 26).

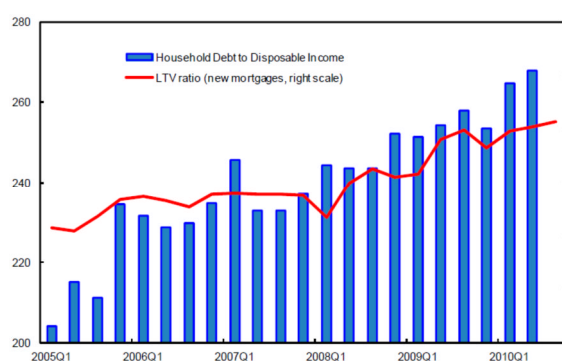


Figure 22: Dutch Households Debt Burden

Data source: IMF (2011)

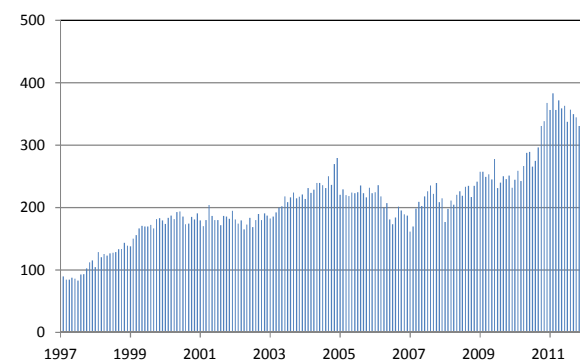


Figure 23: Funding Gaps of Dutch MFIs (€ Bn)

Data source: Data Source: ECB Statistical Data Warehouse

The excessive exposure due to a general tendency to over-trade implies systemic funding risks for the banking industry, as individual institutions strove keep pace

with market trends. This further highlighted in figures 27 to 30, which illustrate the excessive funding exposure using some loans- (assets)-to-deposit (liabilities) ratio. These indicate a systemic debt load and an affinity for over lending even before 1997, which sustained throughout the span of the data at levels above those obtainable in comparable euro-area countries. Although, the share of both deposits and loan in MFIs total balance sheet and as a ratio of operating liabilities (i.e. total liabilities less capital and reserves) have decline over time, they fell faster deposit than for loans (see figures 26 and 27). This implied that Dutch residents are saving less and relying increasingly on bank funding for consumption. As a result loans-deposit ratio has remained, on average, above 120 per cent and had deteriorated sharply since 2007 reaching 137.8 per cent by early 2011. Deposit-to-operating liabilities ratio fell from about 55 per cent pre-2004 to about 45 per cent thereafter, indicative of the limited and reducing ability of MFIs to source cheap stable funds. Although, loans-to-operating liabilities ratio also fell, this remained well over the deposit ratio. The resultant loans-deposit gap (i.e. the excess of loans-to-operating liabilities ratio over deposit-to-operating liabilities ratio) is large, in range of 8 to 17 per cent, and has widened continually since 2007. The widening gap consequently thus forced Dutch banks to meet their shortcomings with debt securities, interbank borrowing and international credit finance, thereby increasing the foreign obligations.

As a percentage of total assets, banks deposits again plunged persistently between over the years, and has accounted for less than 50 per cent of MFIs' balance sheet since 2004 (see figures 26 and 29). The declining ratio, again, implies that banks are financing their activities to a lesser extent by stable deposit sources and to a large extent by risky borrowing from foreign savers – particularly in Asia and oil exporting countries – and the international credit market with its immanent volatility. At the same, the loans-to-asset ratio though declining was generally higher at nearly 60 per cent since 2004, emphasising the wide funding gap in the domestic financial markets. This development, reflecting the reducing propensity of Dutch households and residents to save, consigns banks to jostling for the retail banking business

while concentrating on for borrowing and lending as well as investment banking activities in the global market.

The nature of competition that existed also impinged on the solvency of Irish financial institutions. As banks assumed increased exposure, the share of operating liabilities (i.e. non-capital liabilities) in banks' balance sheet rose continuously, albeit gently, between 1997 and 2011 (see figure 28). The rising ratio automatically implied a declining capital-asset ratio. Figure 29 indicates a general and persistent deterioration of MFIs' ratio. Capital adequacy (unweighted for risk) deteriorated continually over the data span, and only showed a marginal improvement circa 2008 following the government bail-out that recapitalised some financial institutions. In general, Dutch banks were grossly undercapitalised even prior to the financial crisis as the capital-to-asset ratio was below the 8 per cent threshold recommended globally by the bank of international settlement.

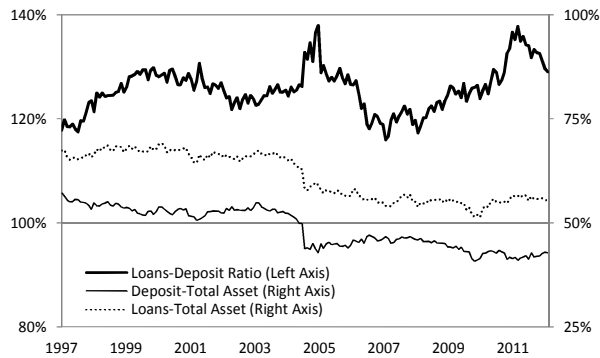


Figure 24: Loan-Deposit Analysis of Dutch MFIs

Data Source: ECB Statistical Data Warehouse

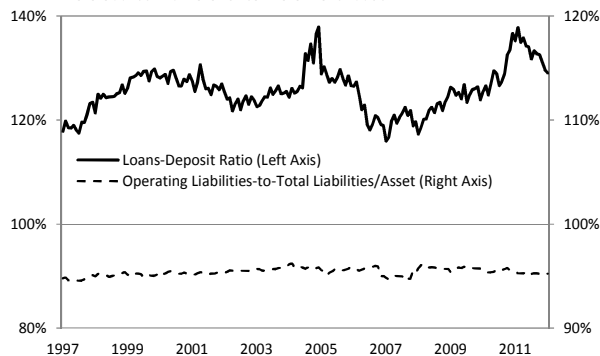


Figure 26: Asset-Liabilities Relationships of Dutch MFIs

Note: Operating liabilities are defined here as total liabilities less capital and reserves.

Data Source: ECB Statistical Data Warehouse

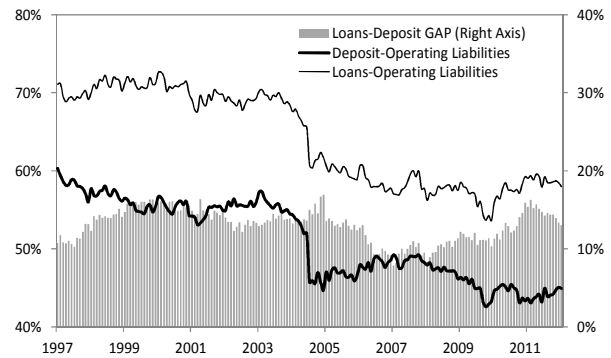


Figure 25: Ratios of Loans and Deposit to Operating Liabilities

Data Source: ECB Statistical Data Warehouse

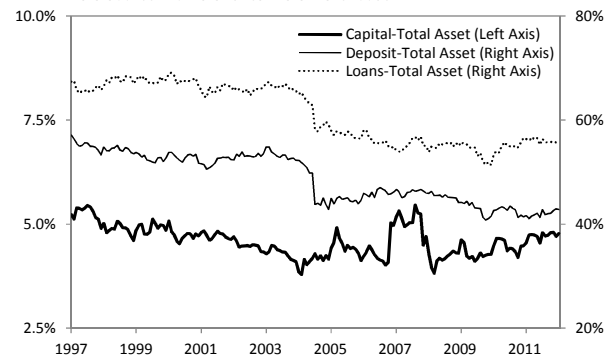


Figure 29: Balance Sheet Ratios of Dutch MFIs

Note: Capital here represents capital plus reserves as contained inextricably in the data source.

Data Source: ECB Statistical Data Warehouse

Banks' ratios, in figure 30, showed very moderate improvement since 2010 pursuant to the intervention of the Dutch government in the financial sector after the crisis. Given the terminally insolvent conditions of some institutions, especially the so-called SIFIs, and its potential destabilising effect on the entire system the state embarked on a number of initiatives that would help the financial sector survive the severe consequences of the crisis. First, in October 2008, the Dutch government acquired FORTIS Bank Nederland, including the parts of ABN-AMRO that FORTIS had acquired.¹ Subsequently, ABN-AMRO, FORTIS Verzekeringen Nederland and FORTIS Corporate Insurance (now ASR Nederland) became significantly publicly owned. However, following the continued run on FORTIS bank, even after the bailout,

¹ Following the deteriorating health of ABN-AMRO in the immediate pre-crisis years, the bank was acquired in 2007 by a consortium made up of Royal Bank of Scotland, Banco Santander and Fortis Bank at a apparently overinflated price (see also LARSON, M. J., SCHNYDER, G., WESTERHUIS, G. K. & WILSON, J. 2011. Strategic Responses to Global Challenges: The Case of European Banking, 1973–2000. *Business History*, 53, 40–62.).

the government in November 2008 decided on an outright merger of two ailing institutions – ABN-AMRO and FORTIS Bank Nederland – under the corporate name ABN-AMRO (Larson et al., 2011). Hence, the new look ABN-AMRO became completely state owned. Second, the Dutch government provided €20 billion on a broader scale to strengthen the capital reserves of MFIs and insurance corporations with a view to guaranteeing financial system stability. Among all the banks, ING was the first to request assistance for such government-sourced capital injection. Finally, the Dutch government set aside €200 billion as guarantees on bank loans, which was available to financial institutions that found it difficult to access capital market finances. These schemes notwithstanding, the Dutch financial sector remains vulnerable as loan-to-deposit ratio lingered above 130 per cent while capital-asset ratio was less than 5 per cent in 2011 – although the risk weighted ratio surpassed the obligatory 8 per cent threshold (see figures 29 and 30 and table 4).

5. The Profitability of the Financial Sector

Although, financial stability has improved since the crisis the Dutch system remains very vulnerable. The banking sector continues to be largely oligopolistic with the top five institutions contributing approximately 85 per cent of industry's total assets. The overall capital adequacy ratio (CAR) of the sector was 13.5 per cent in 2011, of which 11.8 per cent are Tier 1 capital (see table 4). Since 2008, banks' have become increasingly more liquid. Their liquidity improved relative to their balance sheet size but has deteriorated vis-à-vis short-term liabilities. The fall in the liquid assets to short-term liabilities is nonetheless inconsequential as they exceeded 175 per cent, generally, indicating that liquid assets covered short-term liabilities sufficiently. In addition, as a ratio of total gross loans nonperforming loans (NPL) have been maintained at moderate and manageable level of between 1.7 per cent and 3.2 per cent; an average of 2.7 since 2008.

Banks are profiting from the return of calm to the financial markets with the improving results facilitating the build-up of buffers is facilitated (DNB, 2011). Aggregate indicate that profitability of the banking system has recovered in the years since the financial crisis. Return on assets (RoA) increased from a loss position of -0.4 per cent in 2008 to a profit of 0.2 per cent in 2011 while return in equity (RoE) of improved from -15.5 per cent to 5.4 per cent, in the respective periods. Nonetheless, the results of Dutch SIFIs are substantially below those of comparable institutions across Europe, a situation that may potentially lead to undesirable pressure to assume more risks or make buffer build-up secondary to shareholders' return on investment (DNB, 2011). Banks' improved profitability is in part attributable to by high interest income and declining additions to the provisions. Trading income as a ratio of total income recovered from -67.1 per cent in 2008 to 4.0 per cent in 2011 as interest margin share of gross income tended towards pre-crisis levels, hovering around 70 per cent between 2009 and 2011. Besides, over the last five years, banks have made considerable provisions for future depreciations following the financial crisis.

Table 4: Financial Stability Indicators (per cent)

	98-00	01-05	2006	2007	2008	2009	2010	2011	Average
Regulatory Capital to RW-assets	11.6	12.2	11.9	13.2	11.9	14.9	13.9	13.5	12.5
Regulatory Tier 1 Capital to RW-assets	8.7	9.5	9.4	10.2	9.6	12.4	11.8	11.8	9.9
Capital to assets	5.4	4.6	3.0	3.3	3.2	4.3	4.4	4.3	4.4
Liquid assets to total assets	12.5	20.2	27.3	26.1	21.7	25.8	21.4	24.8	20.4
Liquid assets to short-term liabilities	161.4	248.4	226.7	226.8	202.1	187.4	176.2	175.8	208.7
NPL net of provisions to capital	n.a.	n.a.	n.a.	n.a.	35.0	51.8	47.1	44.2	44.5
Nonperforming loans to total gross loans	n.a.	n.a.	n.a.	n.a.	1.7	3.2	2.8	2.7	2.6
Return on assets	0.5	0.5	0.4	0.6	-0.4	0.0	0.3	0.2	0.4
Return on equity	14.2	14.9	15.4	18.7	-12.5	-0.4	7.1	5.4	10.8
Interest Margin to Gross Income	56.1	58.0	51.4	52.0	182.6	69.8	61.7	73.0	67.8
NIE to Gross income	74.1	74.8	74.0	78.3	223.1	78.1	77.1	86.6	86.7
Trading income to total income	8.9	8.1	10.3	7.3	-67.1	11.9	3.9	4.0	2.7
Personnel expenses to NIE	51.9	51.9	46.4	46.9	50.1	48.3	56.1	49.3	50.9

Source: DNB

Notes: Figures under the column labelled average are for contiguous years from 1998 to 2011 including those years that were suppressed for space management. **RW-assets** stands for risk weighted assets; **NPL** represents nonperforming loans; while **NIE** is non-interest expenses. **98-00** is the period average for 1998 to 2000 while **01-05** is the average for the 2001-2005 period.

Nevertheless, funding risk remains a challenge, given the reliance on wholesale market funding. Although client-driven revenues outweighed risk-driven revenues in

total revenue, the latter expanded faster than the former in the years preceding the financial crisis as banks undertook an increasing quantum of capital market and investment banking activities which were deemed more profitable (DNB, 2009). Thus, an area of concern remains whether banks will be sufficiently prudent in valuating exposures and assessing possible losses. For a number of markets there are still important downward risks especially in the housing market and in markets for commercial real estate – although less so for Dutch vis-à-vis European markets. Besides, the international securitisation market is an important source of funding which further exposes the foreign portfolios of Dutch banks to additional risks. The Dutch financial sector attracts a relatively large amount of wholesale funding, accounting for about 12 per cent of total European banking debt issuance (DNB, 2011). However, availability of market funding is limited such that banks need to concentrate on the savings market. Throughout the credit crisis, savings emerged as a crucial source of stable financing. Attracting more savings through the retail banking segment is therefore a veritable means of shaking-off the reliance wholesale market and ensuring that banks remain robust.

Following the crisis, it is realistic to expect that the profitability of retail banking (though superior to that of investment banking) market will remain under pressure, with losses being in many cases unavoidable. However, there are three important ways of increasing profitability (DNB, 2009). Firstly, banks can increase earnings through improved customer experience and pricing practices. Secondly, they can undertake effective cost management procedures given their sizable fixed costs and the comparatively narrow margins per customer. Finally, better risk management and collection management to rein-in the incidence of NPL can enhance retail banking profitability. The financial crisis and ensuing recession have reduced the demand for retail products reinforced by a more cautious approach to lending by retail banks – for instance as shown in table 4, banks increased net interest margins on at the end of 2008. This, in addition to the heightened capital requirements by financial markets and authorities, has put pressure on the profitability of banks. The

falling demand is traceable to the important role of trust in the market. It is imperative that customers perceive that their interests – savings and investments – are secure; otherwise, with crumbling confidence, the already declining customer loyalty will deteriorate faster. This may adversely affect the profitability of respective retail banks in the Netherlands, half of whose profit derive from the patronage of (rather footloose) affluent and high net-worth individuals (DNB, 2009).

For other segments of the financial system, insurance corporations and pensions funds, profitability has deteriorated over the years, and more so during the financial crisis. As institutional investors, these rely on interest income and equity market returns for their profitability. However, the permanent decline in over the past couple of decades and dwindling fortunes at the capital market led to a corrosion of their revenue. Following the crisis equity valuation dipped sharply globally creating a sizeable dent to investors' earnings. This is aggravated by the low interest rate regime during the crisis meant to stimulate the economy out of recession. For pension funds the attendant fall in interest income coupled with the increasing longevity of life-expectancy and its resultant burgeoning pay-out put enormous strains on profitability. The profitability of the Dutch life insurance sector was also impinged by the rising life-expectancy and competition in the market for tax-deductible savings; hence, the net cash flow of insurance firms has been low leading to a negative outcome in 2010 (DNB, 2011). This implied that premium payments surpassed receipts for the entire insurance sector where profitability is diminishing with time.

6. The Regulatory Framework of the Dutch Financial System

In the Netherlands, the framework for supervising the whole financial system is enshrined in the Financial Supervision Act which was promulgated by the Dutch Parliament. This Act lays out the responsibility and obligations of the banks, insurance corporations, pension funds and other financial institutions as well as the

structure and mandate for supervision. Currently, the Netherlands adopts a duumvirate approach to financial sector regulation; which was initiated in 2002 and finalised in 2007. This is the so-called “twin peaks” supervision model that encompasses two supervisory bodies: the Dutch central bank - De Nederlandsche Bank (DNB) and the Netherlands Authority for Financial Markets (AFM). The ultimate responsibility of financial sector supervision, however, lies with the Minister of Finance, to whom the two supervisory bodies are responsible. Under this model, DNB is set-up a single prudential supervisor for all financial institutions (including banks, insurance companies, investment firms, pension funds, and securities firms), while AFM is responsible for conduct-of-business supervision (including supervision of security market activities) with a strong focus on market behaviour and consumer/investor protection (IMF, 2011).

More specifically, DNB as the single prudential regulator is charged with the task of maintaining stability of the entire financial system by ensuring a safe and reliable payment transactions; sound monetary policy (prices stability); and healthy financial institutions. DNB regularly inspects the robustness of financial institutions with a view to curtailing the risks of insolvency and contagion. It is simultaneously concerned with both micro- and macro-prudential aspects of supervision, since it oversees the respective financial institutions individually and the overall financial system together. The AFM as the conduct-of-business supervisor is responsible for the smooth operation of the capital markets and the correct provision of services to national and international clients. The AFM supervises the way financial institutions serve their clients and how parties deal with each other on the financial markets. Financial institutions may not, for example, provide incorrect or misleading information to their customers. Their customers must also be able to understand the information they receive. The AFM's mission is to strengthen consumers' and businesses' confidence in the financial markets, both nationally and internationally. In doing so, it protects consumers and strengthens the economic reputation of the Netherlands.

Notwithstanding the establishment of a single prudential regulator, systemic supervision of the banking, insurance, and pension sector remains a challenge and hence is largely compartmentalised. The decision to set up a unified prudential supervisor ensued from the structure of the Dutch financial industry, which is dominated by a few internationally active SIFIs operating across banking, insurance, and pension sectors, and offering increasingly complex financial products that blurred the conventional credit, insurance, and securities frontiers (IMF, 2011). DNB was saddled with prudential responsibilities based on “(i) synergies between prudential and monetary policy aspects and close link between macroeconomic stability and financial stability; (ii) the expectation that prudential supervisors could benefit from the central bank’s macroeconomic analysis, as well as from the central bank’s long standing credibility; and (iii) the intention to enhance DNB’s role with new responsibilities at the time when monetary policies became the responsibility of the European Central Bank (ECB) – this would limit the potential conflict of interest between monetary policy and financial stability objectives” (IMF, 2011, p.23). Traditionally, DNB’s approach to banking supervision reflected the approach of many central banks with emphasis on moral suasion. However, since the adoption of the “twin peaks” system prudential supervision has witnessed a significant change in the way it is practiced. Having realised the limitations of moral suasion, DNB has now ushered in welcome measures to revolutionise the prevailing norm, and has undertaken the comprehensive VITA-project which ensures a more intrusive and conclusive method of supervision.

Under the duumvirate framework there, however, are still capacities for improvement especially with regards to empowering the domestic oversight agencies as well as to cross-border supervision. Although with micro- and macro-prudential oversights concentrated in one institution, additional strengths have become evident as DNB has the ability to take a systemic view, which allows for quickly and decisively reaction in the face of crisis. A crucial area of concern, nonetheless, is the explicit legal restriction against imposing broadly applicable

intra-group exposure limits to insurance groups; instead these are controlled case-by-case through indirect measures (IMF, 2011). The regulatory agencies should have discretion to put in place enforceable rules that apply broadly over supervised institutions. For effective implementation of the enhanced supervisory regime, the supervisory authorities need to be adequately resourced and empowered.

However, according to the IMF (2011), the ability of DNB and the AFM to apply prudential or conduct-of-business rules at a system-wide level is largely constrained. Despite strategic synergies between these supervisory agencies, they require different skill sets and different tools to accomplish their individual objective. Though concerns in the conduct-of-business are often precursors of prudential difficulties, the regulatory requirements and powers essentially differ. Rulemaking authority is currently limited and needs to be strengthened. Presently, the DNB and the AFM lack sufficient discretion to install enforceable rules that apply at a system-wide level. The effect of this is twofold. First, the agencies are placed in a position where, rather than introduce system-wide prudential or conduct-of-business norms in a particular circumstance, they must approach the regulated institutions individually citing ad hoc factors. Second, the ad hoc nature of the rule-making also risks chilling supervisors' willingness to act forcefully, including, out of concern that the request will be challenged.

Given the international focus of the Dutch financial system, cross-border ownerships and dealings further creates considerable complexities and challenges for supervisory agencies. Many Dutch-based financial conglomerates seeking the gains from internationalisation have established branches and subsidiaries overseas while a number of foreign-based multinational financial institutions own branches and/or subsidiaries in the Netherlands. Besides many Dutch-based institutions – even those with limited proprietorships abroad – are linked to the international financial markets through bilateral cross-selling of financial derivatives and securities. This international interconnectivity of financial markets and institutions create regulatory gaps while concurrently increasing the risk of contagion across borders. To militate

against this type of challenges, the Dutch regulatory authorities are cooperating with counterpart authorities especially across Europe with respect to cross-border oversight function.

The 2008 credit crisis highlighted the need for a robust cross-border supervision of financial institutions and the financial system. Subsequently, according to the Government of the Netherlands (undated), three European supervisors have been inaugurated to oversee specific segments of the financial market. These are the European Banking Authority (EBA); the European Insurance and Occupational Pensions Authority (EIOPA); the European Securities and Markets Authority (ESMA). However, DNB and the AFM remain supervisory authorities of the domestic financial institutions in the Netherlands. The AFM's supervision of credit rating agencies, however, is gradually being assumed by ESMA. To oversee the European economy as a whole and the stability of the entire European financial system, the European Union has established a new independent body: the European Systemic Risk Board (ESRB) that will report to the European Parliament at least once a year (Government of the Netherlands, undated).

The escalation of the sovereign debt crisis and deterioration of public finances in some European countries has given rise to a dangerous interaction between the soundness of the financial sector, that of governments, and stagnating growth prospects, which contributed to the crumbling confidence of consumers and investors and heightens the insolvency risks of financial institutions. To further enhance financial system resilience, DNB requires that systemically important banks prepare for specific requirements, including the build-up of an extra capital buffer and the development of recovery plans. Under Basel III, banks are obliged to build up extra capital buffers in times of excessive credit growth, which can be drawn upon during a crisis. This countercyclical capital buffer, which is to be adopted for both domestic and cross-border supervision will be gradually phased in as of 2016 and become fully operational as of 2019 with the credit-to-GDP ratio serving as a key indicator for buffer decisions (DNB, 2009). Going forward, DNB's Supervisory

Strategy for 2010-2014 has incorporated the key lessons learned from the financial crisis of 2008/2009. DNB is implementing tighter supervision by adopting a supra-institutional approach in its macro-prudential supervision, to complement the traditional micro-prudential supervision at the institutional level (IMF, 2011).

7. The Nature and Effects of the Financial Crisis

Over the years, the Dutch economy has been characterised by very low unemployment, continuous growth of GDP and per capita income, and burgeoning business and commercial confidence. Being an export oriented economy, the external trade gave rise to a large and stable current account surpluses. At the same time, the fiscal accounts indicated a low level of government debt and a budget in surplus. With all these, the Dutch economy was deemed resilient to financial and economic crisis; a view that was bolstered when the economy seemed unfazed and impervious at the onset of the financial crisis in 2007 as growth remained positive and was maintained above European average (Masselink and van den Noord, 2009). However, given the enormous dependence of the Dutch financial system on foreign markets, the economy was eventually hit by the wave of the global crunch causing GDP growth to reverse in 2009.

The Dutch financial system was severely affected by the global financial crisis. Domestic institutions were critically exposed to international markets, notably in the USA, while the concurrent acceleration of private sector credit growth has led to a build-up of imbalances. Hence, financial markets were vulnerable to the international securities markets and domestic lending market. In the global market, financial institutions invested heavily in very risky assets, like subprime mortgages and related products which were primarily financed using short-term debt securities (Masselink and van den Noord, 2009). Specifically, Dutch-based banks were exposed to USA securitized mortgages, including through their USA-based subsidiaries, and were affected by the tightening of the interbank funding market (IMF, 2011). The

burst of the USA housing bubble burst caused widespread distress in the banking sector owing to the high degree of interconnectivity of financial institutions through cross-selling of one another's mortgaged-based derivative securities. With accelerating default rates in the subprime market, confidence within the banking sector waned sharply and suddenly, leading to considerable problems in the market for interbank loans. The problems of the financial institutions reflected internationalisation Dutch financial institutions into markets with pervasive problems, such as the U.S. subprime and mortgage markets.

Generally, the financial crisis affected the Dutch economy through weakening global demand and deteriorating bank balance sheets, to which the economy was comparatively vulnerable vis-à-vis other European countries. Given its considerable degree of openness, the Dutch economy is precariously susceptible to the sudden sharp decrease in world trade, which crystallised when the global trade plunged during the crisis. The fall in global trade, caused massive decline in Dutch export and trade balances and affected the retarded economic growth significantly. The over exposure of Dutch financial institutions to foreign markets and their high LTV to an already debt-overloaded household in the domestic economy ensured that banks liquidity and solvency were corroded at the incidence of the financial crisis. At the onset of the crisis, total foreign exposure of banks stood at over 300 per cent of GDP while household debt was nearly 120 per cent of GDP with an LTV of about 115 per cent (Masselink and van den Noord, 2009). Although the consequent deleveraging which banks undertook during the crisis did not halt credit downrightly, it nonetheless retarded its growth considerably. A large adjustment occurred in mortgage lending, the growth in which has substantially weakened since 2008, from an annual increase of around €45 billion to just under €15 billion at end-2010 (DNB, 2011). This reflected both demand and supply effects. The fall in the sheer amount of home sales caused a dip demand for new mortgages while banks, at the same time, became more cautious following the crisis.

In addition to the banking system, the global impinged on other segments of the financial system especially institutional investors like insurance corporations and pension funds. This was reflected in the adverse effect the assets of these institutions conveyed mainly via the capital market, as share prices plunged continuously. Hence, following the crisis, pension funds lost €66 billion (a devaluation of 8.9 per cent vis-à-vis the pre-crisis peak of €763 billion recorded in 2007) while the assets of insurance corporations fell by nearly €5 billion or 1.4 per cent to €356.5 billion. According to Masselink and van den Noord(2009), the wealth losses of pension funds were borne indirectly by households, through higher premiums or lower pension pay-outs, which by corroding household wealth had follow on effects on private consumption and ultimately on economic growth. The effects of the global financial crisis came be summarised as the insolvency of internationally exposed financial institutions and contraction of the economy following an adverse wealth effect on domestic agents.

Over the years the number of financial conglomerates have grown considerably and have become vastly interconnected with the rest of the financial system so that an unexpected bankruptcy in these corporations would destabilise the entire financial industry. In order to salvage the situation, the Dutch government undertook a number of initiatives to avert a probable collapse of the financial system and to stimulate the economy. To moderate the severest effects of the crisis, the government invested extra in keeping people working and businesses running. As a result, public spending grew considerably while public revenue (from taxes etc.) shrank. This is because businesses were making less profit, and people were earning less. With respect to stimulating the domestic economy, the government began accelerating infrastructure programmes, offering corporate tax holidays (to forestall the imminent rise in the rate of unemployment), and export credit facilities. Hence, a total of almost €6 billion was earmarked in 2009 and 2010 at the national level while additional €1.5 billion was provided by the provinces and municipalities. The measures were intended to promote a sustainable economy by specifically

reviving and maintaining employment, supporting business, and accelerating investment in construction, infrastructure and housing.

In rescuing financial institutions, an enormous amount of public support (including a combination of equity injections, liquidity support, and guarantees) was made by available by the authorities to strengthen balance sheets of financial institutions. Most importantly, the injection of public funds to fully recapitalise some banks and insurance company, ensured that some institutions effectively became nationalised while enabling them to regain access to money market funding (DNB, 2009, IMF, 2011). In this regards, the policy requirements of the authorities included “that (i) financial institutions reduce leverage and build buffers; (ii) supervision become more “intrusive and conclusive”—implemented through the DNB’s VITA initiative; (iii) corporate governance be built up; and (iv) crisis management be strengthened” (IMF, 2011, p.11).

The stimulus programmes and the bail-out of financial institutions, however, culminated to the an emergence of government budget deficit of 5.3 per cent of GDP in 2008 in contrast to the surplus of 0.7 per cent of GDP a year earlier and rise in government debts. Prior to the crisis, the level of public debt in the Netherlands was low; standing at approximately 45 per cent of GDP, which was significantly lower than the European average of 59 per cent of GDP. A total of nearly €90 billion (representing 15 per cent of GDP) was spent on rescue operations in addition to the billions of euros in guarantees issued by the government to the financial sector, which constitute contingent liabilities (Masselink and van den Noord, 2009). As it is, the perceived risk profile of the Dutch government has deteriorated, not only because the government issued explicit guarantees during the crisis, but also because of the realisation that the government implicitly guarantees substantial risks as well (DNB, 2011).

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THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'

THE PARTNERS IN THE CONSORTIUM ARE:

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3	School of Oriental and African Studies	UK
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