

INTERNATIONAL MONETARY FUND



# **Staff Country Reports**

## **Sweden: Financial Sector Stability Assessment**

This Financial Sector Stability Assessment on Sweden was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on June 23, 2011. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Sweden or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

Copies of this report are available to the public from

International Monetary Fund • Publication Services  
700 19<sup>th</sup> Street, N.W. • Washington, D.C. 20431  
Telephone: (202) 623-7430 • Telefax: (202) 623-7201  
E-mail: [publications@imf.org](mailto:publications@imf.org) Internet: <http://www.imf.org>

**International Monetary Fund**  
**Washington, D.C.**

# INTERNATIONAL MONETARY FUND

## SWEDEN

### Financial System Stability Assessment

Prepared by the Monetary and Capital Markets and European Departments

Approved by José Viñals and Antonio Borges

June 23, 2011

This report summarizes the findings of the Financial Sector Assessment Program (FSAP) Update for Sweden. The mission visited Stockholm during March 9–22, 2009. The team comprised Ghiath Shabsigh (Head), Elias Kazarian (Deputy), Rita Babihuga, Michaela Erbenova, Dale Gray, Kotaro Ishi, Nada Oulidi, Katharine Seal, Stephanie Stolz (all IMF), and the following outside experts: Keith Bell, Richard Britton, Tom Kokkola, Su Hoong Chang, and Philippe Troussard. Concluding meetings were held with Minister of Finance Borg, Governor of the Riksbank Ingves, and heads of various Swedish agencies.

The main findings of the mission are as follow:

- Financial stability analysis indicates that banks are resilient but could face difficulties with respect to liquidity risks owing to their heavy reliance on short-term wholesale funding.
- Against the backdrop of continuing house price increases and the high and rising household indebtedness, the performance of mortgage loans should be monitored closely.
- The current financial stability arrangement is comprehensive, although the existing framework could be augmented by establishing a high level Systemic Financial Stability Council (SFSC) to coordinate financial stability policies and actions.
- The assessments of standards and codes show that compliance is generally high, although important concerns need to be addressed. In particular, Finasinspektionen's (FI) operational independence and resources need to be strengthened.
- Although bank failure has been handled in a relatively effective manner, a robust and flexible framework to intervene and resolve all financial institutions is needed, including introducing a special bank resolution regime and reforming the framework for deposit insurance scheme.

*FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAP assessments do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.*

<b>Contents</b>	<b>Page</b>
Glossary .....	<a href="#">4</a>
Executive Summary, Key Findings, and Recommendations .....	<a href="#">6</a>
I. Background .....	<a href="#">9</a>
A. Macroeconomic and Financial Setting .....	<a href="#">9</a>
B. Implementation of 2002 FSAP Recommendations .....	<a href="#">12</a>
II. Financial Stability Assessment .....	<a href="#">13</a>
A. Financial Stability and Risk Factors .....	<a href="#">13</a>
B. Stress Testing Vulnerabilities in the Banking Sector .....	<a href="#">15</a>
III. Macroprudential and Financial Stability Framework .....	<a href="#">17</a>
IV. Sectoral Regulation and Supervision .....	<a href="#">18</a>
A. Banking .....	<a href="#">18</a>
B. Insurance .....	<a href="#">19</a>
C. Securities Markets .....	<a href="#">20</a>
D. Payment Systems and Other Market Infrastructure .....	<a href="#">20</a>
E. Anti-Money Laundering and Combating the Financing of Terrorism .....	<a href="#">21</a>
V. Cross-Border Supervision and Cooperation .....	<a href="#">21</a>
VI. Systemic Liquidity .....	<a href="#">22</a>
VII. Crisis Management and Bank Resolution .....	<a href="#">23</a>
Annex—Observance of Financial Supervision Standards and Codes—Summary	
Assessments .....	<a href="#">35</a>
A. Basel Core Principles for Effective Banking Supervision .....	<a href="#">35</a>
B. IAIS Insurance Core Principles .....	<a href="#">52</a>
C. IOSCO Principles and Objectives of Securities Regulation .....	<a href="#">62</a>
D. Assessments of Observance of CPSS Core Principles for Systemically Important Payment Systems .....	<a href="#">75</a>
E. Assessment of Observance of CPSS-IOSCO Recommendations for Securities Settlement Systems and Central Counterparties .....	<a href="#">84</a>
Tables	
1. Key Recommendations .....	<a href="#">8</a>
2. Selected Economic Indicators, 2005–11 .....	<a href="#">10</a>
3. Structure of the Financial System .....	<a href="#">26</a>
4. The Core Set of Financial Soundness Indicators for Banks, 2003–11 .....	<a href="#">27</a>
5. Financial Soundness Indicators Nonbanks, 2003–10 .....	<a href="#">28</a>
6. Summary of Credit Risk Stress Testing Results, 2011–15 .....	<a href="#">29</a>
7. Funding Cost and Other Earnings Assumptions .....	<a href="#">30</a>
8. Counterparty Risk Stress Test Results (Tier 1 Capital Ratio) .....	<a href="#">30</a>

## Figures

1. Household Debt as Share of Disposable Income.....	<a href="#">12</a>
2. Loan Geographic Distribution .....	<a href="#">13</a>
3. Financial Soundness Indicators in Cross-Country Comparison, 2010 .....	<a href="#">31</a>
4. Market Indicators for the Four Major Banks in Sweden, 2007–10 .....	<a href="#">32</a>
5. Macroeconomic Assumptions in Macro Stress Tests .....	<a href="#">33</a>
6. Structural Liquidity Stress Test Results.....	<a href="#">34</a>

## Boxes

1. Key Crisis Intervention Measures.....	<a href="#">11</a>
2. Government Support to Credit Institutions Act.....	<a href="#">25</a>

## Appendixes

I. Summary of Key Recommendations of the 2002 FSAP and Their Implementation .....	<a href="#">97</a>
II. Risk Assessment Matrix.....	<a href="#">99</a>
III. Stress Tests for Banks.....	<a href="#">101</a>

## GLOSSARY

AML	Anti-money laundering
AIRB	Advanced Internal Rating-Based
BCP	Basel Core Principles for Effective Banking Supervision
BIS	Bank for International Settlements
CAR	Capital adequacy ratio
CCP	Central counterparty
CEBS	Committee of European Banking Supervisors
CFT	Combating the financing of terrorism
CPSS	Committee on Payment and Settlement System
CRD	Capital Requirements Directive
DARs	Detailed Assessment Reports
DIS	Deposit insurance scheme
EBA	European Banking Authority
ECB	European Central Bank
EEA	European Economic Area
ELA	Emergency liquidity assistance
ESRB	European Systemic Risk Board
ESCB	European System of Central banks
EU	European Union
FATF	Financial Action Task Force
FI	Finansinspektionen (Swedish FSA)
FSB	Financial Stability Board
FSIs	Financial Soundness Indicators
FSAP	Financial Sector Assessment Program
GDP	Gross domestic product
IAIS	International Association of Insurance Supervisors
ICA	Insurance Contracts Act
IFAC	International Federation of Accountants
IOSCO	International Organization of Securities Commissions
LCR	Liquidity coverage ratio
LTV	Loan-to-value
MiFID	Markets in Financial Instruments Directive
MOF	Ministry of Finance
MOU	Memorandum of Understanding
NECB	Prosecution authority
NOMX DM	NASDAQ OMX Derivative Markets
NPL	Nonperforming loan
NSFR	Net stable funding ratio
OTC	Over-the-counter
RB	Riksbanken
ROSCs	Reports on Observance of Standards and Codes

RWA	Risk-weighted assets
SEK	Swedish Krona
SFSC	Systemic Financial Stability Council
SNDO	Swedish National Debt Office
SROs	Self-regulatory organizations
TNs	Technical notes
WEO	World Economic Outlook

## EXECUTIVE SUMMARY, KEY FINDINGS, AND RECOMMENDATIONS

**The Swedish economy has rebounded strongly.** The impact of the financial crisis on Sweden's economy and financial sector was substantial, resulting in a sharp output contraction, currency depreciation, and major banks faced liquidity strains, which, coupled with concerns about asset quality in banks' operations in the Baltics, have led to sharp decline in banks' share prices. The authorities' response was forceful, introducing a wide range of extraordinary measures that helped to contain the impact of the crisis, and restore market stability and confidence. Economic indicators improved markedly in 2010, and banks' capital position and profitability strengthened, allowing the exit from crisis-response measures to begin in April 2010.

**Financial stability analysis indicates that banks are resilient to credit risk, but could face difficulties with respect to liquidity risks.** The stress testing results show that banks should be able to maintain adequate capital in the face of severe credit risk shocks, owing to high profits and capital buffers, and relatively high-quality loan portfolios. Liquidity stress tests suggest vulnerabilities due to the banks' heavy reliance on short-term wholesale funding. The authorities' intention to accelerate the implementation pace of Basel III capital requirement, impose higher than minimum capital requirements on the largest and systemically important banks, and tighten liquidity regulations are welcome steps, given the nature of banks' exposures and prevailing risks.

**Against the backdrop of continuing house price increases and the high and rising household indebtedness, the recently introduced regulatory cap on the loan-to-value ratio of 85 percent is a good start.** The authorities should continue monitoring the situation and be prepared to tighten this cap if house prices continue to increase at the same pace.

**Liquidity risks that emerged during the crisis were managed well, but some weaknesses were exposed.** The authorities should monitor liquidity much more closely by instituting higher quality liquidity reporting. In addition, the governance framework of international reserve management should be clarified and the Riksbanken's (RB's) collateral framework reviewed.

**The current financial stability arrangements are comprehensive and key elements are in place to ensure effective macroprudential oversight.** Considerations could be given to augmenting the existing framework by establishing a high level Systemic Financial Stability Council (SFSC) to coordinate financial stability policies and actions among the various relevant authorities with clear lines of responsibilities and accountability.

**The assessments of standards and codes show that compliance is generally high, although important concerns need to be addressed.** In particular, issues related to Finansinspektionen's (FI's) operational independence, and the sufficiency of its resources are overarching concerns, and could potentially impair FI's ability to discharge its supervisory and oversight functions adequately and effectively. FI and RB should clarify further their respective regulatory responsibilities for financial infrastructures and enforce adequate risk management procedures for the central counterparty (CCP).



**Sweden has put in place a good framework for cross-border supervision.** The framework is developing within the context of the European Union (EU)-wide arrangements but has emerged as a good model for other countries. Supervisory colleges for major Swedish banks, and the Nordic-Baltic Memorandum of Understanding (MOU) and other arrangements, create a sound foundation for cross-border crisis management and burden sharing. However, further work might be needed on modalities for addressing potential cross-border liquidity and improving information sharing.

**Although recent bank failures have been handled in a relatively effective manner, the crisis revealed shortcomings in the toolkit for dealing with failing banks.** While legislation for dealing with systemic crises has been introduced, a robust and flexible framework to intervene and resolve all financial institutions is needed, including introducing a special bank resolution regime and reforming the deposit insurance legal framework.

**The authorities have committed to swiftly address the concerns that were raised by the FSAP.** In particular, the authorities will proceed immediately to strengthening FI's resources and independence, and will begin a review of the legal frameworks for bank resolution and securities markets. A task force has been established to coordinate and oversee the implementation of envisaged reforms.

**Table 1. Sweden: Key Recommendations**

<b>Recommendations</b>	<b>Timing Priority</b>
<b><i>Financial stability</i></b>	
Establish a high-level SFSC.	ST, HP
Monitor closely the performance of mortgage loans.	ST, HP
Collect and monitor on a regular basis loan default rates and nonperforming loans (NPLs) by sector and geographical allocation.	MT, MP
<b><i>Cross-sector issues (banking/insurance/securities)</i></b>	
Increase FI's resources to ensure effective supervision.	ST, HP
Enhance the operational independence of FI in discharging its supervisory responsibility by, inter alia, redefining the function and nature of the appropriations letter.	ST, HP
Broaden the scope of FI's discretion in issuing binding secondary regulations in the insurance sector.	MT, MP
Enhance crime prosecution in the securities market sector including for insider dealing and market manipulation.	MT, HP
<b><i>Payment and market infrastructures</i></b>	
Enhance NOMX DM's risk management procedures and separate financial resources between NOMX DM and NOMX COM.	ST, HP
Review the relevant laws and regulations to address the legal uncertainty related to settlement finality and collateralization procedures.	ST, HP
Review its Act to allow RB to issue regulations, and formalize the division of responsibilities between the RB and FI.	MT, MP
<b><i>Crisis management arrangements</i></b>	
Reconstitute the mandate of the Domestic Standing Group to focus on contingency planning and crisis management.	MT, MP
Hold crisis simulation exercise with all parties to the domestic MOU.	MT, MP
Carry out a reform of deposit insurance, including shortening the payout period and redefining the payout trigger.	MT, MP
Introduce a special bank insolvency regime with a possibility of deposit insurance fund to support bank restructuring.	MT, MP
<b><i>Liquidity risk management</i></b>	
Formalize communication between RB and FI in assessing institutions' solvency and viability in the context of emergency liquidity assistance (ELA).	MT, MP
Develop a formal process, in the context of the proposed SFSC, on international reserve management policy.	MT, MP
<b><i>AML/CFT</i></b>	
Establish measures in relation to the criminalization of terrorism financing to enable the freezing of all funds.	MT, MP
Amend the legal framework to require current beneficial ownership information.	MT, MP

(ST: short-term, implementation within 12 months; MT: medium-term, 1–3 years).

## I. BACKGROUND

### A. Macroeconomic and Financial Setting

1. **The global financial crisis severely affected Sweden's economy causing a deep recession, but the economy has rebounded strongly (Table 2).** Swedish GDP contracted by 7½ percent from the second quarter of 2008 to the second quarter of 2009, the krona depreciated by close to 20 percent against the euro, equity values halved, and unemployment rose from 6 percent to nearly 10 percent. Since mid-2009, the economy has rebounded, with real GDP growth reaching 5½ percent in 2010. Public finances remain the strongest among advanced economies, with the fiscal balance projected to return to surplus in 2011.
2. **The impact of the financial crisis on Sweden's financial sector was significant.** The crisis led to some strains in various segments of funding markets, including in euro and dollar liquidity. In particular, due to extensive reliance on short-term wholesale funding, coupled with increased market concern about exposures to the Baltics, several Swedish banks faced acute funding pressures.<sup>1</sup> The non-banking financial sector was also adversely affected: the solvency ratio of insurance companies fell on the back of falling equity prices,<sup>2</sup> while mortgage bond yields rose to unprecedented levels relative to comparable government bond yields.
3. **The authorities' forceful policy response helped restore confidence.** The RB implemented new liquidity measures through expanding its balance sheet, and took a number of steps to support banks' liquidity needs and reassure markets (Box 1). At the same time, the Government Support to Credit Institutions Act was enacted in October 2008 to deal with distressed systemically important institutions; the Swedish National Debt Office (SNDO) borrowed externally to boost international reserves; and the RB used swap lines established with the ECB in 2007 and the U.S. Federal Reserve in 2008. Meanwhile, banks strengthened capital positions through right issuance. These policies were successful in restoring market stability, and financial sector strains eased by the mid-2009.
4. **Nonfinancial corporations have rebounded from the recent crisis.** Corporate financial positions strengthened during 2010, particularly for large export-oriented companies. Moreover, banks' exposure to the corporate sector is much lower than during the 1990s crisis—the share of corporate loans in banks' total loan portfolio has fallen to 22 percent, while the household share has risen to 34 percent.

---

<sup>1</sup> Markets raised particular concern about asset quality in banks' operations in the Baltics, and share prices of banks with significant exposures there dropped sharply in late 2008-early 2009.

<sup>2</sup> Life insurers' solvency was badly hit in 2009 by a combination of falling asset prices and a sharp fall in interest rates. The impact of the financial crisis on non-life insurers was more moderate, although the overall operating income and solvency ratio dropped in 2008.

**Table 2. Sweden: Selected Economic Indicators, 2005–11**

	2005	2006	2007	2008	2009	2010	Projections	
							2011	2012
<b>Real economy (in percent change)</b>								
Real GDP	3.2	4.3	3.3	-0.6	-5.3	5.5	4.4	3.8
Domestic Demand	3.0	3.9	4.7	0.0	-4.9	6.1	2.9	3.3
CPI inflation	0.8	1.5	1.7	3.3	2.0	1.9	3.0	2.5
Unemployment rate (in percent)	7.6	7.0	6.1	6.2	8.3	8.4	7.4	6.6
Gross national saving (percent of GDP)	24.5	27.2	29.6	28.9	23.4	25.0	26.0	27.0
Gross domestic investment (percent of GDP)	17.7	18.7	20.3	20.2	16.3	18.5	20.0	21.4
Output Gap (as a percent of potential)	4.2	5.6	5.4	1.5	-5.9	-3.1	-1.6	-0.9
<b>Public finance (in percent of GDP)</b>								
Total Revenues	53.8	53.0	52.5	51.9	52.1	50.7	49.3	48.6
Total Expenditures	51.8	50.8	46.1	46.6	49.7	47.8	45.2	44.2
Overall balance	1.9	2.2	3.6	2.2	-0.9	-0.3	0.8	1.3
Structural balance (as a percent of potential GDP) <sup>1/</sup>	3.0	1.9	1.0	0.9	1.3	1.4	1.3	1.2
General government gross debt, official statistics	50.4	45.3	40.2	38.8	42.8	39.8	36.1	32.7
Gross public debt, Maastricht criterion	50.2	45.0	40.0	38.3	42.1	...	...	...
<b>Money and credit (12-month, percent change)</b>								
M1	9.4	11.1	9.9	4.9	8.0	7.1	...	...
M3	7.5	10.6	12.5	10.4	8.2	4.5	...	...
Credit to non-bank public	10.8	11.2	14.3	7.7	...	...	...	...
<b>Interest rates (year average)</b>								
Repo rate	1.5	3.0	4.0	2.0	0.3	1.3	...	...
Three-month treasury bill rate	1.7	2.3	3.5	3.8	0.4	0.5	...	...
Ten-year government bond yield	3.4	3.7	4.2	3.9	3.3	2.9	...	...
<b>Balance of payments (in percent of GDP)</b>								
Current account	6.8	8.4	9.2	8.7	7.0	6.3	6.0	5.7
Trade balance	7.2	7.8	7.2	6.6	6.6	6.0	5.8	5.4
Foreign Direct Investment, net	-4.5	0.7	-2.3	1.2	-5.2	-2.1	-2.1	-2.1
International reserves (in billions of US dollars)	26.4	26.0	29.7	35.4	44.2	46.6	53.9	55.8
Reserve cover (months of imports of goods and services)	2.1	2.0	1.8	1.7	3.0	3.3	2.9	2.9
<b>Exchange rate (period average, unless otherwise stated)</b>								
Exchange rate regime	Free Floating Exchange Rate							
Skr per U.S. dollar (June 1, 2011)	6.15							
Nominal effective rate (2000=100)	99.2	99.5	101.3	99.5	90.7	97.8	...	...
Real effective rate (2000=100) <sup>2/</sup>	84.4	80.2	84.2	84.4	80.0	81.8	...	...
<b>Fund Position (April 30, 2011)</b>								
Holdings of currency (in percent of quota)	74.51							
Holdings of SDRs (in percent of allocation)	100.74							
Quota (in millions of SDRs)	2395.50							

**Social Indicators (reference year)**

**GDP per capita** (in current PPP US dollars, 2009): 35,805; **Income Distribution** (ratio of income received by top and bottom quintiles, 2005): 3.3; **Life expectancy at birth** (2009): 79.3 (males) and 83.3 (female); **Automobile ownership** (2004): 456 per thousand; **CO2 Emissions** (tonnes per capita, 2007): 5.4; **Population Density** (inhabitants per sq. km., 2008): 22; **Poverty Rate** (share of the population below the established risk-of-poverty line, 2005): 9%.

1/ Staff Estimates

2/ Based on relative unit labor costs in manufacturing.

Sources: Statistics Sweden; Riksbank; Ministry of Finance; Datastream; INS; and IMF staff estimates.

### Box 1. Key Crisis Intervention Measures

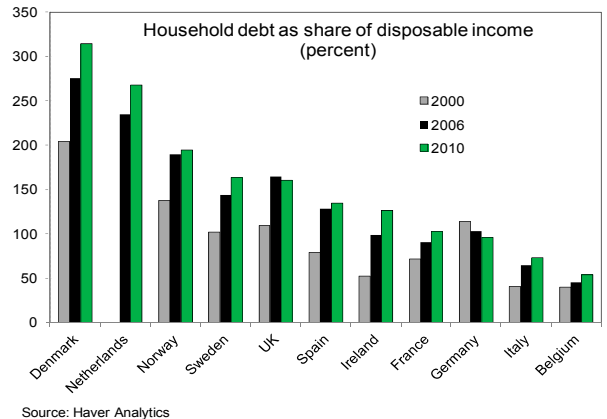
Measures	Status
<b>Measures to increase liquidity in Krona and foreign currencies (mostly introduced in September - December 2008)</b>	
The Riksbank expanded a collateral policy framework by fully accepting covered bonds and lowering the minimum credit rating requirements for long-term securities pledged as collateral.	Active.
The Riksbank set up new 3, 6, and 12-month loan facilities to facilitate banks' access to longer-term funds.	Replaced by 28-day loan facility with a penalty rate, April 2010.
The Riksbank established a new temporary credit facility using commercial paper as collateral to facilitate the supply of credit for non-financial companies.	Discontinued, September 2009.
The Riksbank granted emergency liquidity assistance to Kaupthing Bank Sverige AB and Carnegie Investment Bank AB (both SEK 5 billion). Later, the former bank was sold to Alandsbanken by its Icelandic owners, while the latter was taken over by the state and later sold to private investors.	All repaid.
The Riksbank and U.S. Fed set up temporary reciprocal swap facilities (\$30 billion). A separate swap facility was also established with the ECB.	Active, but currently no use.
New dollar term loan facilities (with the maturity of 28 and 84 days) were introduced.	Discontinued, November 2009.
The SNDO held extraordinary auctions of treasury bills to provide markets with securities generally accepted as collateral. The funds raised were invested (via repos) in covered bonds to support the covered (mortgage) bond markets.	Discontinued.
<b>Measures to support banks' capital and assure market confidence (all measures were introduced in October 2008)</b>	
The deposit guarantee was raised from SEK 250,000 to SEK 500,000, and the coverage was broadened to include all types of deposit.	To be raised to EUR 100,000 (about SEK 895,000) from 2011.
The parliament enacted the "Government Support to Credit Institutions Act," which gives the government unlimited fiscal powers to finance measures needed to ensure financial system stability. The support can be provided through guarantees, capital injections, or other means. Support would be provided based on contracts between the government and a bank.	Active.
- National Debt Office was given power to take over a troubled bank if there is a serious systemic risk and bank capital falls below 25 percent of the regulatory requirement.	Active.
- A debt guarantee scheme for the medium-term borrowing of banks and mortgage institutions was established. The total amount of guarantee was set at SEK 1.5 trillion (later reduced to SEK 750 billion). An institution applying to the guarantee would pay fees and be subject to restrictions on remuneration for senior management.	Active, but currently no use.
- A recapitalization scheme was established for solvent banks and other credit institutions. The government's capital injection takes the form of shares or hybrid capital (Tier 1 capital). Participating institutions are subject to restrictions on remuneration for senior management.	Active, but currently no use.
- A stabilization fund was set up, aimed at financing government measures to support the financial system. The sources of the funds are annual fees from banks and other credit institutions. The government contributed to SEK 15 billion for the establishment of this fund.	Active.

5. **Reflecting improved market conditions and the economy's rebound, the authorities began, in April 2010 to exit from crisis-response measures.** The RB has terminated the extraordinary liquidity measures, the size of its balance sheet has shrunk markedly, and the policy rate has risen 150 basis points in total to 1.75 percent. Nonetheless, risks remain, stemming from a highly concentrated banking sector with important foreign activities and continued reliance on wholesale funding, including in foreign currencies.

6. **House prices and household indebtedness have risen steadily over the past two decades, prompting concerns about their sustainability.**

Prices rose by some 40 percent from 1995 to 2010, and unlike elsewhere, did not correct following the recent crisis. However, the pace of growth has slowed recently. This follows the imposition of an 85 percent loan-to-value ceiling in October 2010 and the policy rate increases since July 2010. Household debt has increased by twofold since 1995 and the share of variable interest rate debt rose from below 10 percent to 50 percent of the total outstanding stock, with younger and low-income households most vulnerable to interest rate increases (Figure 1).

Figure 1. Sweden: Household Debt as share of Disposable Income



7. **Household lending has historically not generated significant losses for the financial system.** Mortgage credit quality is high owing to several structural features of the Swedish housing market. The highly regulated covered bonds market through which mortgages are financed provides incentives for lenders to engage in selective mortgage origination. The Swedish bankruptcy law makes it difficult for borrowers to “walk away” from their debt. By law, a borrower is personally liable for life, even after a default and foreclosure procedure has been initiated by the bank. A well-developed and generous social welfare system implies that households’ ability to service debt does not necessarily deteriorate during periods of unemployment. Further, the absence of a speculative “buy-to-let” market due to a highly regulated rental market and tenant owner subletting restrictions has prevented the development of a speculative bubble.

## B. Implementation of 2002 FSAP Recommendations

8. **The 2002 FSAP assessment revealed that overall Sweden had a sound financial system, although weaknesses in the regulatory and supervisory framework were identified.** Of specific concern were deficiencies in observing the core principles dealing with the oversight of “fit and proper” rules and propriety of the management of banks and insurers, the extent of consolidated supervision and on-site inspection process, loan

provisioning, connected lending, and remedial actions. Furthermore, the FI lacked sufficient resources to carry out effective supervision and the power to take interim or corrective action measures.

9. **Implementation of these recommendations has been mixed.** The authorities have made progress in many areas such as consolidated supervision and cross-border supervision and cooperation. Nevertheless, progress needs to be made to: further increase FI's resources in order to ensure effective supervision; enhance licensing requirements, including "fit and proper" test to senior management; and establish an appropriate crisis management and bank resolution framework (see Appendix I).

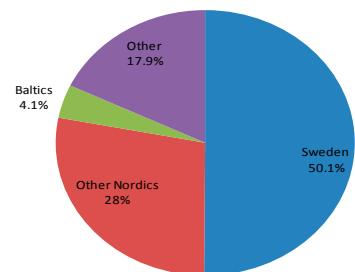
## II. FINANCIAL STABILITY ASSESSMENT

### A. Financial Stability and Risk Factors

10. **The Swedish financial sector is sizeable and dominated by systemically important institutions.** The financial system's assets are equivalent to 5½ times of GDP.

The four largest banks—Swedbank, Nordea, SEB, and Handelsbanken—account for 86 percent of banking sector assets. Banks' lending is predominantly in Sweden and other Nordic countries, although cross-border exposures also exist in the Baltics (Figure 2). The insurance sector is well developed and accounts for 14 percent of financial sector assets. The top five life insurers accounted for 61 percent of assets of the life sector as of end-2009, and the top five nonlife insurers have about 55 percent market share of gross premiums written in 2009. All major banks have insurance subsidiaries and some large insurers have bank subsidiaries. In addition, there are mortgage and other credit market companies, some of which are bank subsidiaries, that also extend credit.

Figure 2. Sweden: Loan Geographic Distribution



11. **The financial position of the four largest banks appears robust.** Capital adequacy ratios (CAR) are well above the regulatory minimum levels, supported by solid profits and recapitalizations which took place in late 2008/09 through rights issues. Banks' profits rebounded from their 2009 lows arising from losses in the Baltics.

12. **While the life and nonlife insurance sectors have different risk profiles, both are exposed to developments in global financial markets through their sizable foreign investments** (32 percent of total assets of the industry). Life insurers have higher levels of investments in equities, and are particularly vulnerable to low interest rates. Nonlife insurers write a significant level of foreign risks (34 percent of gross premiums in 2009), and face intense competition that weight on premium rates.

13. **Sweden has well developed financial and securities market infrastructures.** In 2009, the RB introduced a state-of-the-art funds transfer system (named RIX). Further, the Swedish Central Securities Depository (CSD) merged with Euroclear Group. NASDAQ OMX runs the Swedish stock exchange, the derivatives exchange and the electronic inter-dealer exchange for certain government bonds. This same entity acts as the central counterparty (CCP) for derivatives and repo transactions. During the crisis, these systems were resilient and were able to handle the increased numbers of transactions.

14. **Sweden is a regional banking hub.** Its significance rests more in its role as a home than as a host jurisdiction. However, since fewer than half of the consolidated assets of the systemic groups are located in Sweden it has a critical role to play in ensuring the financial stability of the region. Sweden has responded actively to the challenges of its position through its proactive home-host arrangements, making full use of the opportunities created by the EU legislative framework with respect to its work within colleges of supervisors.

15. **Vulnerabilities in the banking sector arise from exposures to:**

- **Renewed global recession.** As a small open economy, with large trade sector and external financial sector linkages, Sweden is highly exposed to the global economy. Global recession would adversely affect bank asset quality through various transmission channels including increased unemployment, deteriorating corporate earnings, and a sharp correction in real estate prices.
- **Funding risks.** Banks rely heavily on short-term wholesale funding, which makes them vulnerable to market disruptions and liquidity risk. Banks' mortgage lending is largely funded through the covered bond market (mostly in SEK). Some banks seize arbitrage opportunities by contracting cheaper short-term foreign exchange debt in the wholesale markets, which they then convert to SEK to finance mortgages. This funding structure poses vulnerabilities to the banking sector if such markets dry up or their cost increases sharply, including in response to a shift in investors' risk appetite.<sup>3</sup>
- **Cross-border lending.** Banks' lending is predominantly in Sweden and other Nordic countries. Around 4 percent of total loans are in the Baltic countries, where Swedbank and SEB have the largest exposures (approximately 10 percent).

---

<sup>3</sup> The covered bond market in Sweden is regulated in accordance with the 2004 Swedish Covered Bond Act. Under the act, investors are secured by "double recourse:" they have recourse to both the collateral pool backing the specific covered bond program and to the estate of the bank on its default. Currently, most of Swedish covered bonds are held by insurance, banks, and other financial institutions. Foreign investors hold more than one third of covered bonds issued.



- **Sustained declines in real estate prices.** Housing and property developers' loans account for 60 percent of total lending.

## **B. Stress Testing Vulnerabilities in the Banking Sector**

16. **A wide range of stress tests were performed on the largest four banks that account for 90 percent of the banking system's total assets.**<sup>4</sup> The stress tests were performed in close collaboration with the RB and FI and include:<sup>5</sup>

- Macro stress tests covering four scenarios.
- Liquidity stress tests.
- Contagion stress tests.

17. **Top-down macro stress tests were conducted by the mission and Riksbank (RB) for the four largest banks under four macro scenarios; these are:**

- a baseline scenario in line with the October 2010 World Economic Outlook (WEO) projections for GDP growth of 2.56 percent in 2011 and 3 percent in 2012, as well as conservative projections for, unemployment, and interest rates;
- a double-dip scenario implying increase in unemployment and interest rates, and assuming deviations in GDP growth by 2.7 percentage points in 2011 and 3.2 percentage points in 2012 compared to the WEO baseline;
- a more severe double-dip scenario assuming twice the deviations from baseline for the macroeconomic and EU sovereign bond market shocks; and
- a prolonged low-growth scenario, including a house-price crash inducing a decline in domestic consumption (Figure 5).

The exercise spanned five years and combined potential losses from three sources: loan losses from credit risk, valuation losses from sovereign exposures held both in the banking and trading book, and losses from funding cost increases.

18. **Under the four scenarios, banks showed resiliency.** Despite weak growth and high unemployment assumed under the scenarios, and subsequent increases in bank losses during the crisis years, banks' capital ratios remain above the 4 percent Tier 1 regulatory minimum, the 6 percent CEBS threshold, and the 8 percent total CAR regulatory minimum under both the FSAP and RB models (Tables 6). Shocks to sovereign bond portfolios and funding costs

---

<sup>4</sup> The details of the stress testing methodology are presented in a separate technical note.

<sup>5</sup> Owing to data confidentiality, liquidity, contagion, and counterparty stress tests were carried out by the RB. The mission team was presented with the methodologies and estimations.

do not have a major impact, given banks' limited sovereign bond exposures<sup>6</sup> (including both the banking and trading books), in particular to the vulnerable European countries, and the assumed high degree of pass through of increased funding cost.<sup>7</sup> Moreover, post-shock credit losses are not significant given banks' high quality loan portfolios and low initial values of credit risk measures. Strong operating profits and large loan loss provisions built-up during the crisis also serve as first line buffers against the losses.

**19. Liquidity risk stress tests covered both short-term cash outflows and structural maturity mismatches.** The tests were carried out by the RB. Two measures similar to Basel III liquidity-coverage ratio and net-stable-funding ratio were calculated. The first measure evaluates banks' liquidity buffers under stressed scenarios to cover unexpected outflows over three months. Unexpected cash outflows could arise as a result of a drying up of wholesale markets, deposit withdrawals, and a drawing down of unused credit lines (Figure 5). The second measure assesses banks' structural long-term liquidity relating the weighted average of their liabilities to the weighted average of their assets.<sup>8</sup>

**20. Liquidity stress-test results show that banks lag in both liquidity metrics behind other European banks owing to their heavy reliance on short-term market funding.** The short-term liquidity measure is significantly less than 100 percent, suggesting that banks do not have sufficient liquidity reserves to cover modeled cash outflows. The weakness in the structural measure reflects the heavy reliance on non stable, short-term market funding to finance relatively illiquid assets, as well as the large share of banks' assets in mortgages, which in Sweden are kept on banks' balance sheets (not securitized, as in some other countries).

**21. Large exposures and contagion tests evaluated the impact of concentration risk and interbank exposures as regards unsecured lending, securities, and derivatives.** The tests were carried out by the RB.<sup>9</sup> The results seem to suggest that banks could withstand the default of a major bank but not the joint default of their three largest exposures. The latter would result in a significant impact on banks' capitalization, although none of the banks would fall below the limit of 4 percent in Tier 1 capital ratio.

---

<sup>6</sup> Government bond holdings are relatively marginal at 5 percent of assets, and large banks' direct sovereign exposures to vulnerable European countries are less than 0.5 percent of shareholders' equity as of March 2010.

<sup>7</sup> Banks have historically been able to pass through entirely the increase in their funding costs to borrowers.

<sup>8</sup> The weights of assets are based on liquidity and those of liabilities on stability of funds.

<sup>9</sup> The contagion tests evaluated the impact of a bank defaulting on its payments to other banks, while the large exposure stress tests evaluated the impact of a default of large counterparties on banks. These contagion tests did not evaluate the systemic spillover risks from the failure of small banks and resulting deterioration of market confidence.

22. **The balance sheet stress tests for the four major banks were complemented with tests based on the contingent claims analysis (CCA) framework.** The results of the balance sheet stress tests were used to estimate changes in bank assets, and together with the impact from changes in global risk appetite, CCA outputs were calculated for the four scenarios 2011–2015 period. The outputs are: (i) expected losses to creditors; (ii) bank credit spreads; (iii) CCA capital ratio (market value of equity from the scenario output divided by the market value of assets); and (iv) capital shortfall measure. The results, which are qualitatively similar to the results of the balance sheet stress tests, show that in the adverse scenarios, expected losses increase and equity capital decreases until 2012 and then begin to rebound. However, the magnitude of the deterioration is much smaller than in 2009 during the financial crisis, no bank has a capital shortfall in any year of the stress test.<sup>10</sup>

23. **The crisis has revealed a lack of sufficient granularity in data for monitoring financial sector developments.** This was evidenced by the lack of consistent sectoral and geographic breakdowns of data on banks' nonperforming assets. The authorities should regularly collect and monitor loan default rates and nonperforming loans (NPLs) by sector and geographical allocation, in particular housing related loans.

24. **Finally, the robustness of the banks' financial positions is largely attributed, as demonstrated by the stress tests, to current high level capital buffers.** Accordingly, the authorities' plan to accelerate the implementation of Basel III capital requirement, based on the current high banks' capital level, and to tighten liquidity regulations is appropriate. Furthermore, the authorities' intention to impose higher than minimum capital requirements on the largest and systemically important banks is a move in the right direction, given the nature of major banks' exposures and prevailing risks.

### III. MACROPRUDENTIAL AND FINANCIAL STABILITY FRAMEWORK

25. **Financial stability responsibilities in Sweden are spread across a number of authorities.** The FI has a statutory mandate for financial stability and to actively promote consumer protection. The RB, on the other hand, does not have in its charter an explicit financial stability mandate but is responsible for promoting a safe and efficient payments system and has some instruments that are directly relevant to financial stability, including the provision of ELA and systemic liquidity. The MOF bears the ultimate political responsibility as the fiscal authority, but is also responsible for legislation in the financial sector and plays a role in crisis management as public funds might be called upon to support failing institutions. Finally, the SNDO manages the stability fund, deposit insurance and investor protection systems and is the support authority when public funds are conferred to credit institutions.

---

<sup>10</sup> The capital shortfall concept in the CCA analyses is a proxy concept and does not exactly correspond to regulatory capital shortfalls.

26. **Consideration could be given to establishing a high-level SFSC to focus solely on financial stability and related macroprudential policies.** The SFSC would become the focal point for coordinating financial sector policies and actions across agencies. In setting up the proposed council and to ensure its effectiveness, decisions would be needed on the scope of analysis, range of risks to be addressed by the policy, the set of instruments, and institutional and governance frameworks. Consideration could be given to include independent members in addition to the MOF, RB, FI, and the SNDO. It is critical that member authorities are represented at the highest level to ensure effective discussions. Finally, given the legal independence of the involved authorities in carrying out their separate mandates, the SFSC should be consultative in nature requiring, to ensure its effectiveness, clear lines of public accountability (including possibly reporting to Parliament) for discussions, positions, and commitments expressed by members.

#### IV. SECTORAL REGULATION AND SUPERVISION

27. **The assessments of the most relevant financial sector standards and codes show that compliance is generally high, although important concerns need to be addressed.**<sup>11</sup> In particular, FI's operational independence, clarity of day-to-day mandate, and insufficiency of resources are overarching concerns, each of which could impair FI's ability to discharge its supervisory and oversight functions adequately and effectively.<sup>12</sup> The operational independence of FI in discharging its supervisory responsibility should be enhanced, including setting its own priorities and work program within its legal mandate by, inter alia, ensuring the appropriations letter is issued only once annually and is drafted in terms of high level principles.

##### A. Banking

28. **The banking supervisory framework and its implementation in Sweden are in line with many of the Basel Core Principles.** Since the advent of the global financial crisis, FI has instituted a more robust supervisory approach, which has made important advances on the previous regime and initiated a number of fruitful projects. Nonetheless, FI's overall capacity to supervise banks, including any meaningful program of on-site inspection, is impacted by a staffing shortage.

<sup>11</sup> See the DARs prepared for each sector; the Basel Core Principles for Effective Banking Supervision (BCP); the International Association of Insurance Supervisors (IAIS); the International Organization of Securities Commissions (IOSCO) Objectives and Principles of Securities Regulation; the Committee on Payment and Settlement Systems (CPSS) Principles for Systemically Important Payment Systems; and the CPSS and the IOSCO Recommendations for Central Counterparty (CCP). Information was obtained to update the May 2010 assessment of compliance with the Financial Action Task Force (FATF) 40+9 Recommendations on the Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT).

<sup>12</sup> As a governmental agency, FI reports directly to the MOF and its operational independence could be impaired through the mechanism of the annual appropriations letter process when several amendments during a budget year could take place.

29. **Not all of FI's legal powers are as robust or as well developed as they need to be.** There are some significant deficiencies relating to the legal framework within which the supervisory authorities operate. These include:

- the lack of legal basis to assess the fitness and propriety of senior management of licensed firms, or to remove such individuals. FI has powers to assess only the Managing Director, but not the senior executive management;
- the absence of a pre-notification requirement to FI of major acquisitions made by supervised firms, unless the acquisition is 25 percent or greater of capital base; and
- although FI has wide powers of intervention in the event that an institution breach its obligations under the Banking and Financing Business Act, FI's powers of sanction are subject to appeal and the execution of an administrative decision of the FI is suspended until the appellate procedure is completed. While redress and appeal mechanisms are necessary, the current framework creates a degree of regulatory uncertainty and could potentially exacerbate the management of a crisis situation.

30. **Progress has been made in consolidated supervision and home-host relationships.** FI is active in pursuing and achieving some success in moving beyond pure information exchange into joint supervisory activity, assessment and decision making for the consolidated group, which is a notable achievement. Resources are crucial for further progress in this area.

## **B. Insurance**

31. **The Swedish regulatory framework has a high level of observance with the ICPs.** The new Insurance Business Act, which entered into effect on April 1, 2011, and the impending implementation of Solvency II will strengthen FI's supervision, going forward. However, there is scope for improving the coverage, intensity, and intrusiveness of FI's supervision. Further, the authorities are advised to review the continued involvement of the government in institution-specific supervisory issues.

32. **The insurance sector has so far been able to cope with a low interest environment.** This is mainly due to the investment-linked policies (ILPs) as policyholders assume all investment risks including interest rate risks. Second, for traditional policies, Swedish insurers have lowered the guarantee levels for new traditional policies issued. While their legacy portfolios carry higher levels of guarantees, there have not been widespread solvency concerns, so far. FI's Traffic Light model indicated that "insurance companies have good buffers in order to manage their risks."

33. **There is a need for formulating a risk-based supervision approach that is supported by appropriate baseline supervision.** FI's insurance supervisory staffs are competent and qualified. However, due to resource constraints, FI has been focusing its

supervision on the larger insurers with minimal attention to smaller insurers and intermediaries. Prudential supervision should be strengthened by fit and proper assessments of senior management of insurers, adequate regulatory reporting, and enhanced group supervision.

### C. Securities Markets

34. **FI is broadly compliant with international standards but there are certain weaknesses.** In particular, the legislative and the regulatory framework limit FI's independence and its ability to effectively discharge its mandates. Further, the limited resources and high turnover of experience staff undermines FI's capacity to supervise effectively securities firms and investment fund managers. Risk-based supervision helps but all firms should be subject to a minimum level of supervision.

35. **The process of representation prior to the imposition of a major sanction such as license revocation should be enhanced.** FI should consider whether enforcement should be fully integrated or separated from the respective supervision teams. Furthermore, the lack of a provision whereby a licensee can make direct representations to the Board prior to it deciding to revoke a license is a major concern.

36. **The balance of power is still too much in favor of securities exchanges and not the FI.** The arrival of new exchanges in Sweden, within a legislative framework in which commercially driven exchanges are primarily responsible for regulating the conduct of issuers which list thereon raises the prospect of a regulatory "race to the bottom." The government should keep the situation under review and, in due course, consider transferring full responsibility for issuer regulation to FI.

### D. Payment Systems and Other Market Infrastructure

37. **The RB's new real time gross settlement system ("RIX") complies with international standards, while the assessment of NOMX DM reveals some shortcomings.** In particular, there are some legal uncertainties regarding the treatment of funds transfer and collateral transactions within RIX. Further, it is crucial to ring-fence the operation of NOMX DM in a distinct legal entity, set up a default fund financed by participants, enhance governance structure through members' representation, introduce a new mechanism for margin collection, and diversify the source of liquidity, including access to central bank money. Both the RB and FI are empowered to carry out oversight and supervisory activities effectively. However, the RB is not empowered to issue regulations on private sector payment systems. Further, the cooperation between the RB and FI, which is guided by a high-level MOU, should be further specified so as to clarify of the division of role and responsibilities.

## E. Anti-Money Laundering and Combating the Financing of Terrorism

38. **In its October 2010 Follow-Up Report to its 2006 Mutual Evaluation Report, FATF recognized that Sweden has made significant progress in addressing deficiencies previously identified and decided that the country should be removed from the regular follow-up process.** The mutual evaluation report had indicated that the Swedish legal requirements in place to combat money laundering and terrorist financing were generally comprehensive, but highlighted a number of areas that could be enhanced.<sup>13</sup> Sweden's AML/CFT system has since been considerably strengthened,<sup>14</sup> including through legislative changes to bolster preventive measures for financial institutions, notably in the areas of customer due diligence, the implementation of a more developed legal and regulatory framework and the enhancement of the scope and effectiveness of financial institutions' supervision. However, two shortcomings remain namely in relation to the standards for the criminalization of terrorism financing to enable the freezing of all funds, and the collection and availability of beneficial ownership information on legal persons.

## V. CROSS-BORDER SUPERVISION AND COOPERATION

39. **The framework for cross-border cooperation in Sweden is developing within the context of the EU-wide arrangements but has in many ways been a good model for other countries.** Given the significant outward cross-border activities of the Swedish major banks, Sweden has responded actively to the challenges of its position. In particular, FI was one of the earliest jurisdictions to start putting colleges of supervisors into place, well ahead of the requirements set out in EU law and guidelines. The colleges are viewed as an active participatory process in order to achieve a shared risk assessment of a group. FI chairs supervisory colleges for the four major Swedish banks, which are fully operational, and bank-specific MOUs on supervisory cooperation have been signed. In 2008, RB signed swap agreements with the central banks of Iceland and Latvia, and in 2009 with the central bank of Estonia, to support crisis management in these countries. Further, authorities from Baltic and Nordic countries were engaged in a stress testing exercise and discussed jointly the necessary follow-up while exchange of supervisory data with Baltic counterparts intensified. The recently completed joint supervisory review process and Pillar 2 capital allocation discussion among supervisors is an important initiative in developing a shared understanding of the risk profile and activities of the large cross-border banking groups and for contingency planning.

40. **Certain elements of the cross-border framework remain to be fully developed.** In particular; (a) the burden-sharing principles of the 2010 Nordic-Baltic MOU need to be complemented with a more structured assessment framework, templates, and a confidential

<sup>13</sup> The full text of the report is at <http://www.fatf-gafi.org/dataoecd/26/35/36461995.pdf>.

<sup>14</sup> Information was provided by the Swedish authorities, based on progress reports prepared by the FATF in 2008, 2009, and 2010.

data warehouse, (b) a platform for information exchange, implied by the bank-specific MOUs, should be developed, (c) FI's resources could be augmented to support the college work, given its resource-intensive nature, and (d) further work might be needed on modalities for addressing potential cross-border liquidity problems.

## VI. SYSTEMIC LIQUIDITY<sup>15</sup>

41. **The authorities managed well the pressures on systemic liquidity and ongoing efforts to strengthen liquidity regulations are welcome.** In December 2010, the FI adopted a new regulation on the governance of banks' liquidity risk management, which embeds the main elements of the Basel principles for liquidity management. It is also planning to introduce a new comprehensive liquidity reporting framework in mid-2011, which includes quantitative liquidity risk measures, as envisaged in the Basel proposal.

42. **However, the institutional and governance arrangement on international reserve management could be clarified.** Although The RB's U.S. dollar lending facility has been effective in easing funding pressures in markets, the legal framework does not clarify how potentially different views on the international reserve management policy between the RB and the SNDO could be resolved. A formal process, in the context of the proposed SFSC once established, should be set up to enable the RB to raise international reserves if deemed necessary in order to mitigate a buildup of systemic foreign exchange liquidity risks.

43. **Moreover, some aspects of the domestic liquidity operational framework could usefully be reviewed.** The RB changed the collateral framework as part of crisis liquidity measures and is still accepting a broader range of assets as collateral for the RB's liquidity operations. A comprehensive review of the collateral framework is appropriately underway, aimed at toughening eligibility criteria, while maintaining a reasonable size of collateral pools and ensuring a level playing field. Furthermore, the RB's liquidity enhancement toolkit to deal with market stress could be expanded to include, for example, a treasury securities lending facility in collaboration with the SNDO.

44. **The design of ELA framework is sound but greater clarity would be helpful.** The RB would provide ELA, at its discretion, only to a solvent and viable institution with liquidity problems,<sup>16</sup> while the SNDO is expected to deal with insolvent institutions as a resolution authority under the Support Act. Given that solvency determination can be subject to considerable uncertainty in a rapidly evolving crisis, the legal framework should clarify which authority is responsible for liquidity assistance in the different phases of events.

---

<sup>15</sup> For more details, see the technical note on systemic liquidity framework.

<sup>16</sup> Eligible institutions include banks (including branched of foreign banks) and Swedish companies subject to FI supervision.



## VII. CRISIS MANAGEMENT AND BANK RESOLUTION<sup>17</sup>

45. **Bank failures during the recent crisis have been handled relatively effectively and the authorities have demonstrated an ability to act in a coordinated and decisive manner.** Nevertheless, the crisis revealed shortcomings in the framework for dealing with failing credit institutions, including the lack of specific rules on bank insolvency. This gap is particularly acute for nonsystemic institutions. A failure of even a nonsystemic institution may adversely affect market confidence and trigger broader contagion risks.

46. **The authorities have launched a comprehensive review of the regulatory framework for crisis management.** A committee was set up to analyze the lessons learned from the recent financial crisis and propose legislative and institutional measures to improve the authorities' crisis management ability. The authorities are also actively involved in the EU-wide review of the crisis management framework as well as in the work of multilateral standard setting bodies.

47. **The FI has a broad range of corrective and remedial powers to deal with a weak bank even though legal certainty is an issue.** The FI has powers to restrict the activities and limit the operation of credit institutions, issue warnings or revoke license, replace a managing director or any member of the Board, and may order an owner with a qualified holding to divest shares. Though there are no formal triggers for early intervention powers and to require prompt corrective action, FI is able to exert supervisory pressure at an early stage. However, as noted above, FI's powers of sanction and decision making can be affected by an appellate procedure that can suspend the execution of an administrative decision, creating legal uncertainty that has important consequences for bank resolution.

48. **The framework for official financial support to systemically important financial institutions (SIFIs) introduced in 2008 is a pragmatic response to the oligopolistic structure of the banking sector (Box 2).** The possibility of government support is envisaged for both continued operation of a systemic credit institution and to support its orderly restructuring or liquidation if it is no longer deemed viable. A Stability Fund, established in 2008, is financed by levies on financial institutions, and will in time provide necessary financial backing reducing direct claims on public funds, while moral hazard is mitigated by valuation rules that exclude account for the state aid.<sup>18</sup> Approaches that would enable the authorities to write down the claims of some or all of the unsecured creditors and to convert debt into equity would usefully complement this framework taking into account work done by the Basel Committee on Banking Supervision and the Financial Stability Board (FSB).

<sup>17</sup> For more details, see the technical note on contingency planning, crisis management and bank resolution.

<sup>18</sup> According to the Support Act, when a bank is taken over by the state, it should be valued based on what its financial situation would have been if it had not received state support.

**49. The SIFI resolution framework should be complemented by a framework for orderly resolution of nonsystemic financial institutions.** General company rules on bankruptcy and liquidation apply to banks and are inadequate for effectively handling bank resolution, while license revocation enforcement could be postponed by shareholders' appeals in multiple courts and a possibility of having action stayed. Furthermore, the insolvency test, defined as inability to pay debts as they fall due, is inappropriate for banks. The mission has urged authorities to introduce a special bank resolution framework for all credit institutions, whether or not *ex ante* they are considered systemic. The FI should be given powers to initiate special bank resolutions administratively based upon the regulatory criteria and at a sufficiently early stage with an aim to ensure continuity of critical functions, minimize public financial support, reduce legal uncertainty and achieve a prompt resolution. The framework should give FI the right to petition for bank insolvency, transfer of assets to third-party acquirers with assumption of liabilities (purchase and assumption) should be enabled by law and the DI fund should be authorized to support purchase and assumption transactions as is already a case in a number of European countries. Finally, while preserving the rights of shareholders to appeal the FI's decision to revoke the license, the possibility that a court stays license revocation should be removed and the shareholders should instead be entitled to monetary damages *ex post*.

**50. The deposit insurance (DI) should be reformed to ensure its greater effectiveness as the first step of creating a holistic resolution framework.** The payout by deposit insurance fund—which is *ex ante* funded and enjoys an unlimited loan backup from the SNDO—is triggered only after the institution has been placed into bankruptcy. The authorities are encouraged to make changes to the DI framework along the lines of the recent government proposal to bring it in line with the applicable EU requirements while work on a more comprehensive resolution framework continues.<sup>19</sup>

---

<sup>19</sup> A government proposal for Deposit Insurance Act amendments has been referred to the Legislative Council in March 2011 and presented to Parliament in April, with an intention for them to come into force on July 1, 2011. The proposal is intended to ensure Sweden's compliance with the revised EU Deposit Insurance Directive and entails *inter alia* shortening the payout deadline to 20 days, stricter information requirements for institutions collecting insured deposits and a new trigger for payout depended on FI's decision. The proposed amendment would also improve information exchange between the FI and SNDO on matters related to deposit insurance.

## Box 2. Government Support to Credit Institutions Act

In October 2008, the Government Support to Credit Institutions Act (2008:814, “Support Act”) was enacted as a framework to deal with weak or insolvent systemically important institutions alongside a package of other measures aimed at increasing confidence and stability of the financial sector.

**Objective:** Government support can be given to financial institutions headquartered in Sweden to counter a risk of severe turbulence in the Swedish financial system.

**Tools:** Guarantees, capital injection, and state takeover are specifically covered in the act. However, the act is broad enough to allow a response targeted to specific crisis situations as it allows also for a support in “other manner” as needed. Specific tools are detailed in government ordinances, including rules on fees paid by credit institutions for support and restrictions on remuneration during the support period.

**Contractual basis:** Support should as a rule be based on a contract between the bank and the state, but measures can be taken also in other cases if it is not possible or suitable to use a contract.

**Support Authority:** The act stipulates that a support authority is responsible for handling support measures, including orderly resolution. The Government has given this role to SNDO, while retaining the right to take final decisions on proposals for support measures put forward by the SNDO.

**Appeal:** In the instance the Support Authority (SNDO) and the institution fail to reach an agreement on the terms for the support, the SNDO can request that the terms be considered by a special Appeals.

Board (“Prövningsnämnden”). The Appeals Board can also rule on disagreements between the SNDO and a bank on the interpretation or application of a support contract. No case has yet been decided by the Board.

**Nationalization:** The SNDO has the right to nationalize an institution if it is of extraordinary importance from the public perspective that the state takes control and (i) the institution has a capital ratio below 2 percent (i.e.,  $\frac{1}{4}$  of the legal requirement); or (ii) refuses to reach an agreement on support on conditions found reasonable by the Appeals Board; or (iii) if the institution does not follow its obligations following from the support agreement. This decision gives rise to a right to buy out also warrants and convertibles issued by the company. Valuation of the shares must be undertaken as though the company had not received state aid. Disagreements about the right to take over an institution or about the valuation are tried by the Appeals Board.

**Stability Fund:** The law created a Stability Fund to be used to fund future support measures associated with administrative costs and functioning of the Appeals Board. Recoveries, fees and other incomes from support measures go to the fund. Credit institutions are required to pay a special stability fee amounting to 0.036 percent of the balance sheet total excluding equity capital and subordinated debt. Payments are placed in an interest-bearing account at the SNDO. The target for the fund is 2.5 percent of GDP within 15 years and can be used for various forms of aid. If the funds fall short of the required support, an automatic unlimited backing by the SNDO is ensured. The authorities envisage exploring a proposal to merge the stability and deposit insurance funds in the future and introduce risk-based fees. In this context, developments at the EU level will also be taken into account.

**Table 3. Sweden: Structure of the Financial System**

	2002				2007				2009				2010				
	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Number of branches	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP
<b>Four Major Banks, consolidated</b>																	
Nordea	1	2,284,713	24.9	93.5	1	3,679,361	24.9	117.7	1	5,212,530	30.3	162.7	1	8	5,491,917	30.7	171.4
Handelsbanken	1	1,277,514	13.9	52.3	1	1,859,382	12.6	59.5	1	2,122,843	12.3	66.2	1	26	2,188,032	12.2	68.3
S.E.B	1	1,241,112	13.5	50.8	1	2,344,462	15.9	75.0	1	2,308,227	13.4	72.0	1	16	2,253,779	12.6	70.3
Swedbank	1	957,503	10.4	39.2	1	1,607,984	10.9	51.4	1	1,794,687	10.4	56.0	1	6	1,845,932	10.3	57.6
Total Top Four Banks	4	5,760,842	62.7	235.7	4	9,491,189	64.3	303.6	4	11,438,287	66.5	357.0	4	56	11,779,660	65.9	367.6
Four major banks in Sweden 1/																	
Banks	4	2,780,140	30.3	113.8	4	6,079,039	41.2	194.5	4	7,040,183	40.9	219.7	4	39	7,110,540	39.8	221.9
Insurance companies	8	297,262	3.2	12.2	9	529,765	3.6	16.9	8	509,691	3.0	15.9	8	2	531,718	3.0	16.6
Mortgage credit institutions	3	945,606	10.3	38.7	3	1,497,436	10.1	47.9	3	1,899,919	11.0	59.3	3	2	1,983,218	11.1	61.9
Securities firms	3	1,181	0.0	0.0	3	20,339	0.1	0.7	3	30,242	0.2	0.9	3	4	9,418	0.1	0.3
Other credit market companies	5	107,520	1.2	4.4	9	195,326	1.3	6.2	8	235,297	1.4	7.3	8	11	222,816	1.2	7.0
Top four banks in Sweden	23	4,131,709	45.0	169.1	28	8,321,905	56.4	266.2	26	9,715,332	56.5	303.2	26	58	9,857,710	55.2	307.6
<b>Other Banks in Sweden</b>																	
Of which:																	
Banks	27	153,122	1.7	6.3	24	404,711	2.7	12.9	30	481,797	2.8	15.0	30	18	509,316	2.9	15.9
Savings banks	77	95,689	1.0	3.9	65	146,450	1.0	4.7	53	164,177	1.0	5.1	52	0	170,670	1.0	5.3
Mortgage credit institutions	11	459,923	5.0	18.8	4	315,522	2.1	10.1	4	436,302	2.5	13.6	4	0	495,149	2.8	15.5
Member bank	2	878	0.0	0.0	2	1,246	0.0	0.0	2	1,521	0.0	0.0	2	0	1,583	0.0	0.0
Other credit market companies	63	368,080	4.0	15.1	45	587,840	4.0	18.8	43	790,385	4.6	24.7	41	30	769,463	4.3	24.0
Total other banks in Sweden	180	1,077,692	11.7	44.1	140	1,455,769	9.9	59.6	132	1,874,182	10.9	76.7	129	48	1,946,181	10.9	79.6
<b>Nonbank credit institutions</b>																	
Insurance companies	165	1,654,032	18.0	67.7	247	2,226,389	15.1	71.2	253	2,351,945	13.7	73.4	254	44	2,487,278	13.9	77.6
Life insurance	38	1,289,888	14.0	52.8	45	1,678,359	11.4	53.7	43	1,782,371	10.4	55.6	44	6	1,924,131	10.8	60.0
Nonlife insurance 2/	127	364,144	4.0	14.9	202	548,030	3.7	17.5	210	569,574	3.3	17.8	210	38	563,147	3.2	17.6
Pension funds	12	80,251	0.9	3.3	15	126,767	0.9	4.1	14	105,567	0.6	3.3	13	0	119,087	0.7	3.7
Mutual funds 3/	615	565,102	6.2	23.1	793	1,416,210	9.6	45.3	849	1,393,337	8.1	43.5	878	0	1,511,564	8.5	47.2
Other nonbank credit institutions																	
Asset management firms	67	3,398	0.0	0.1	82	8,160	0.1	0.3	82	7,346	0.0	0.2	80	0	7,662	0.0	0.2
Securities firms	100	45,500	0.5	1.9	126	40,149	0.3	1.3	132	28,895	0.2	0.9	135	7	14,432	0.1	0.5
<b>Total financial system</b>	1,143	9,186,817	100.0	375.9	1,407	14,764,633	100.0	472.3	1,466	17,199,559	100.0	536.8	1,493	155	17,865,864	100.0	557.6
of which: Total banking sector 4/		6,838,534	74.4	279.9		10,946,958	74.1	350.2		13,312,469	77.4	415.5			13,725,841	76.8	428.4
<b>Memorandum item:</b>																	
Foreign bank branches in Sweden	...	...	...	...	25	753,482	5.1	24.1	24	686,265	4.0	21.4	25		789,194	4.4	24.6
Swedish bank branches in abroad	...	...	...	...	52	1,324,288	9.0	42.4	55	1,411,402	8.2	44.0	57		1,473,498	8.2	46.0
Employees in the financial system	...	...	...	...				76,508				82,991					...
Nominal GDP (in millions of SEK)				2,443,630				3,126,018				3,089,181					3,306,271

Sources: Riksbank, Financial Supervisory Authority, and IMF staff estimates.

1/ Including foreign branches.

2/ Not including minor local companies

3/ Market value of funds

4/ Number of institutions is computed on unconsolidated basis.

**Table 4. Sweden: The Core Set of Financial Soundness Indicators (FSIs) for Banks, 2003–11**

	2003	2004	2005	2006	2007	2008	2009	2010	2011 Q1
<b>Capital Adequacy</b>									
Regulatory capital to risk-weighted assets 1/	10.5	10.6	10.5	10.5	10.2	10.7	13.0	12.6	12.4
<i>of which: Four major banks 2/</i>	10.0	10.1	10.1	10.0	9.8	10.2	12.7	12.0	11.7
Regulatory Tier I capital to risk-weighted assets 1/	8.0	8.3	7.7	7.8	7.5	8.1	10.9	11.0	11.1
<i>of which: Four major banks 2/</i>	7.4	7.6	7.0	7.1	7.0	7.6	10.5	10.4	10.5
Capital as percent of assets (leverage ratio)	5.1	4.8	4.8	4.8	4.7	4.6	5.0	4.7	4.6
<i>of which: Four major banks 2/</i>	5.0	4.8	4.8	4.9	4.7	4.7	5.0	4.7	4.5
<b>Asset quality and exposure</b>									
Nonperforming loans to total gross loans	2.0	1.2	0.9	0.8	0.6	1.1	2.0	1.9	1.7
<i>of which: Four major banks 2/</i>	1.9	1.1	0.8	0.8	0.6	1.0	2.0	1.9	1.7
Nonperforming loans net of loan-loss provisions to capital	11.9	4.8	3.1	4.3	3.4	7.4	10.7	9.9	10.1
<i>of which: Four major banks 2/</i>	11.5	4.0	2.7	3.9	3.1	6.5	11.0	10.6	10.7
Loan-loss provisions to nonperforming loans	49.4	66.2	69.7	56.1	58.3	49.1	55.4	44.3	43.9
<i>of which: Four major banks 2/</i>	50.3	70.6	73.6	58.0	60.4	47.1	53.7	43.8	43.2
Sectoral distribution of bank credit to the private sector (percent)									
Sweden	57.2	56.7	53.8	54.0	52.7	44.0	46.1	50.0	49.5
Nonfinancial corporations	24.3	23.2	21.8	20.6	20.9	19.1	18.3	18.9	18.9
Households	21.5	22.1	20.6	20.6	19.0	18.1	20.4	22.1	21.7
Small personal companies	6.5	6.6	6.4	6.3	6.1	5.6	6.1	6.8	6.7
Insurance companies	0.4	0.4	0.5	0.5	0.6	0.2	0.2	0.3	0.3
Others	4.6	4.3	4.5	6.0	6.1	1.0	1.2	1.9	1.9
Outside Sweden	42.8	43.3	46.2	46.0	47.3	55.4	50.3	46.0	46.5
Geographical distribution of loans to total loans									
Sweden	63.6	47.4	45.8	48.0	48.1	48.5	48.7	50.1	...
Nordic countries	11.9	26.7	28.2	24.4	25.9	25.4	27.8	27.9	...
Denmark	6.3	12.6	13.3	8.6	9.0	8.4	10.3	11.6	...
Finland	2.4	8.0	8.2	8.3	7.8	8.4	7.9	7.5	...
Norway	3.3	6.1	6.8	7.5	9.1	8.6	9.6	8.9	...
Baltic countries	2.2	2.0	3.3	5.2	5.0	5.4	4.9	4.1	...
Estonia	1.1	1.0	1.6	1.9	1.9	2.1	1.8	1.6	...
Latvia	0.4	0.4	0.8	1.7	1.5	1.6	1.4	1.2	...
Lithuania	0.7	0.6	0.9	1.5	1.6	1.8	1.6	1.3	...
Other	22.3	23.9	22.6	22.5	21.0	20.6	18.6	17.9	...
Large exposures as percent of tier 1 capital 3/	26.4	11.1	17.5	18.3	13.4	34.1	12.3	40.2	...
<i>of which: Four major banks 3/</i>	22.2	12.4	12.0	13.3	6.5	30.9	8.1	36.8	...
<b>Earnings and profitability</b>									
Return on assets (Net income as percent of average total assets)	0.6	0.7	0.8	0.8	0.8	0.5	0.3	0.4	...
<i>of which: Four major banks 2/</i>	0.6	0.7	0.7	0.8	0.8	0.6	0.2	0.5	0.4
Return on equity (Net income as percent of average equity capital)	12.5	15.9	18.1	19.9	18.5	12.7	13.0	9.8	...
<i>of which: Four major banks 2/</i>	13.3	16.0	18.7	21.0	19.7	14.3	5.4	10.1	12.8
Net interest income as percent of gross income	64.4	58.9	52.4	49.2	52.4	55.2	56.8	52.7	51.0
<i>of which: Four major banks 2/</i>	64.6	59.2	52.6	49.4	52.7	56.9	57.7	55.3	54.0
Trading income and foreign exchange gains (losses) to gross income	3.0	5.1	9.6	10.5	8.3	8.6	11.7	11.6	12.8
<i>of which: Four major banks 2/</i>	3.5	5.4	10.0	11.2	9.6	9.8	13.6	12.6	13.4
Personnel expenses as percent of noninterest expenses	54.0	53.7	56.0	57.4	57.1	55.0	53.2	52.6	54.9
<i>of which: Four major banks 2/</i>	55.9	55.7	58.4	60.3	60.0	59.2	57.1	57.4	60.4
<b>Liquidity</b>									
Liquid assets as percent of total assets	4.4	5.2	5.0	5.0	5.0	4.0	6.3	4.8	5.1
<i>of which: Four major banks 2/</i>	4.4	5.3	4.6	5.1	5.4	4.3	6.7	5.2	5.4
Liquid assets as percent of short-term liabilities	29.3	30.6	31.6	32.1	34.1	23.6	43.6	44.4	46.4
<i>of which: Four major banks 2/</i>	32.1	34.7	33.3	37.5	43.8	30.5	54.7	58.9	60.8
Customer deposits as a percent of total (non-interbank) loans	50.6	52.6	50.2	53.8	51.4	46.1	47.1	47.8	47.7
<i>of which: Four major banks 2/</i>	49.1	50.8	49.1	53.4	51.3	45.5	45.3	46.6	46.3
Noninterbank loans to noninterbank deposits	142.6	130.8	137.4	135.7	139.8	139.6	144.8	154.9	155.8
<i>of which: Four major banks 2/</i>	150.2	139.6	145.1	143.1	148.4	149.7	156.1	165.9	166.9
<b>Foreign exchange risk</b>									
Foreign currency-denominated loans as percent of total loans	19.1	18.2	21.5	23.4	26.1	28.1	27.8	26.3	...
Foreign currency-denominated assets as percent of total assets	23.9	26.9	28.9	28.9	31.4	32.5	31.0	30.2	...
Foreign currency-denominated liabilities as percent of total liabilities	25.2	23.4	26.1	24.4	25.4	21.8	20.0	19.6	...
<b>Exposure to derivatives</b>									
Gross asset position in derivatives as percent of Tier 1 capital	152.6	176.7	164.7	110.7	132.0	336.8	210.8	222.7	192.4
Gross liability position in derivatives as percent of Tier 1 capital	168.2	188.5	165.2	117.3	136.1	320.7	198.9	218.3	195.8

Sources: Financial Supervisory Authority, Riksbank, and IMF staff estimates.

1/ From 2007, the calculation of capital base follows rules under Basel II.

2/ On consolidated basis




3/ From 2010 onward, exposures to credit institutions are included.

**Table 5. Sweden: Financial Soundness Indicators Nonbanks, 2003–10**

	2003	2004	2005	2006	2007	2008	2009	2010
<b>Insurance sector</b>								
Solvency ratio (margin/required margin)								
Life insurance companies	9.0	8.4	11.2	13.8	14.9	8.4	7.8	11.7
Non-life insurance companies	6.5	5.1	7.7	8.5	9.5	6.8	7.7	11.0
<b>Households</b>								
Household debt as percent of GDP	57.1	60.4	64.3	66.9	69.0	72.8	81.9	82.9
Household interest expense as percent of disposable income	5.6	5.2	4.9	5.2	6.2	7.3	4.9	4.7
<b>Corporate sector</b>								
Debt stock as percent of GDP (non-financial sector borrowing from financial sector)	53.9	51.6	54.0	54.2	60.8	65.7	65.5	61.6
Total debt stock as percent of GDP	74.5	70.4	72.5	69.4	79.4	92.6	92.3	86.8
<b>Equity risk</b>								
OM Stockholm Stock Exchange Index (annual percent change)	-39.7	43.2	10.6	34.9	12.9	-24.0	-25.1	54.4
Equity prices of financial institutions (annual percent change)	-23.9	27.8	29.2	30.2	9.7	-25.6	-52.1	98.2
Market capitalization in percent of GDP	...	...	230.5	260.8	257.2	140.7	188.5	216.2
<b>Real estate markets</b> (prices; year on year percent change)								
One- or two dwelling buildings	6.1	10.0	10.5	10.5	11.3	-2.0	7.1	5.2
Greater Stockholm region	0.7	8.8	9.1	11.6	15.6	-3.2	5.9	6.9
Buildings for seasonal and secondary use	7.9	9.4	13.7	7.6	13.3	-2.8	12.2	0.9

Sources: Financial Supervisory Authority; Riksbank; and IMF staff estimates.

**Table 6. Sweden: Summary of Credit Risk Stress Testing Results, 2011–15**  
(In percent)

	Adverse 1					Adverse 2					Adverse 3				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
<b>Bank 1</b>															
Profits before Loan Losses	-3.6	-3.7	-3.5	-3.4	-3.4	-10.1	-11.4	-11.3	-12.3	-13.2	-6.6	-13.9	-19.6	-20.4	-28.9
Loan Losses	21.2	47.5	30.3	15.9	0.0	43.7	101.0	63.2	32.5	0.0	17.5	91.9	97.6	78.3	59.4
RWA	7.5	15.8	10.5	5.6	0.0	14.7	30.9	20.6	11.0	0.0	6.7	28.5	29.8	24.1	18.4
Tier 1 ratio	10%	9%	9%	10%	11%	9%	8%	8%	9%	10%	10%	8%	7%	8%	8%
Total CAR	12%	11%	12%	13%	14%	11%	10%	10%	12%	13%	12%	10%	9%	10%	11%
<b>Bank 2</b>															
Profits before Loan Losses	-4.9	-4.9	-4.5	-4.5	-4.5	-12.7	-14.0	-13.4	-14.5	-15.5	-25.1	-28.9	-28.1	-30.7	-32.9
Loan Losses	21.3	48.7	31.3	16.5	0.0	43.9	103.7	65.3	33.7	0.0	16.9	94.0	101.7	82.4	63.1
RWA	8.2	17.7	11.8	6.4	0.0	16.2	34.6	23.2	12.6	0.0	7.1	31.8	33.8	27.6	21.5
Tier 1 ratio	10%	9%	10%	11%	12%	9%	8%	9%	10%	11%	10%	8%	8%	8%	9%
Total CAR	12%	11%	11%	12%	13%	11%	9%	10%	11%	13%	12%	9%	9%	10%	10%
<b>Bank 3</b>															
Profits before Loan Losses	-8.2	-8.2	-7.8	-7.7	-7.5 	-21.1	-22.7	-22.1	-23.5	-24.7	-41.1	-45.5	-44.6	-47.7	-50.3
Loan Losses	21.6	49.1	31.5	16.6	0.0 	44.5	104.5	65.6	33.9	0.0	17.3	94.8	102.0	82.6	63.1
RWA	9.5	20.4	13.6	7.4	0.0 	18.7	40.1	26.7	14.5	0.0	8.3	36.8	39.0	32.0	24.9
Tier 1 ratio	12%	11%	11%	13%	14%	11%	9%	10%	12%	14%	12%	9%	8%	9%	10%
Total CAR	12%	11%	11%	13%	14%	11%	9%	10%	12%	14%	12%	9%	9%	10%	10%
<b>Bank 4</b>															
Profits before Loan Losses	-4.7	-4.7	-4.5	-4.6	-4.6	-11.8	-12.8	-13.0	-14.2	-15.2	-22.6	-25.8	-26.6	-29.4	-31.7
Loan Losses	20.7	46.5	29.7	15.5	0.0	42.7	98.9	61.9	31.8	0.0	17.1	89.9	95.7	76.7	58.2
RWA	7.5	16.4	10.9	5.8	0.0	15.0	32.8	21.7	11.4	0.0	6.6	30.0	32.0	25.6	19.6
Tier 1 ratio	11%	10%	10%	11%	12%	10%	8%	9%	10%	12%	11%	8%	8%	9%	9%
Total CAR	13%	12%	12%	14%	15%	12%	10%	11%	13%	14%	13%	10%	10%	11%	11%

Notes: Profits before loan losses, loan losses, and RWA are given in percent deviations from baseline. Tier 1 ratios and total CARs are given in percent.

Sources: Riksbank and IMF staff estimates.

**Table 7. Sweden: Funding Cost and Other Earnings Assumptions**

	Short term market funding that need to be refinanced with long term funding	Outflow of deposits that need to be refinanced with long term funding	% of increased funding cost that can be transferred to customers	A decrease of net commission and other income	A decrease of variable staff cost
Adverse scenario 1	5%	2%	95%	5%	20%
Adverse scenario 2	10%	5%	85%	10%	40%
Adverse scenario 3	15%	10%	80%	15%	60%

Notes: The assumptions were based on historical experience and expert judgment.

Source: Riksbank.

**Table 8. Sweden: Counterparty Risk Stress Test Results**

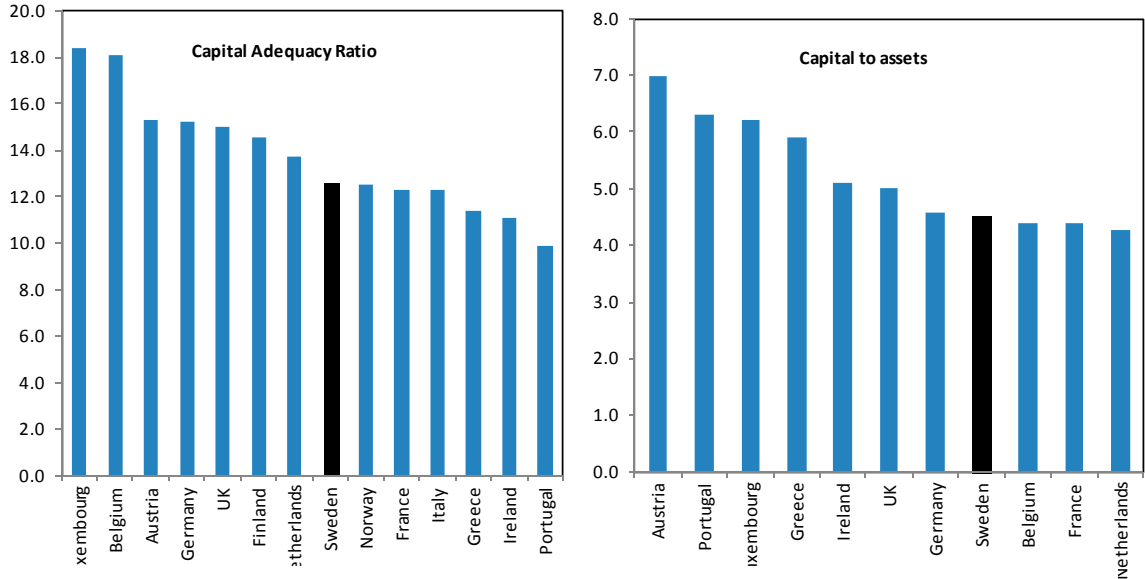
	Tier 1 Ratio %
Bank 1	5.67
Bank 2	4.43
Bank 3	10.51
Bank 4	8.29

Notes: The stress test evaluates the impact of the default of the banks' largest three exposures.

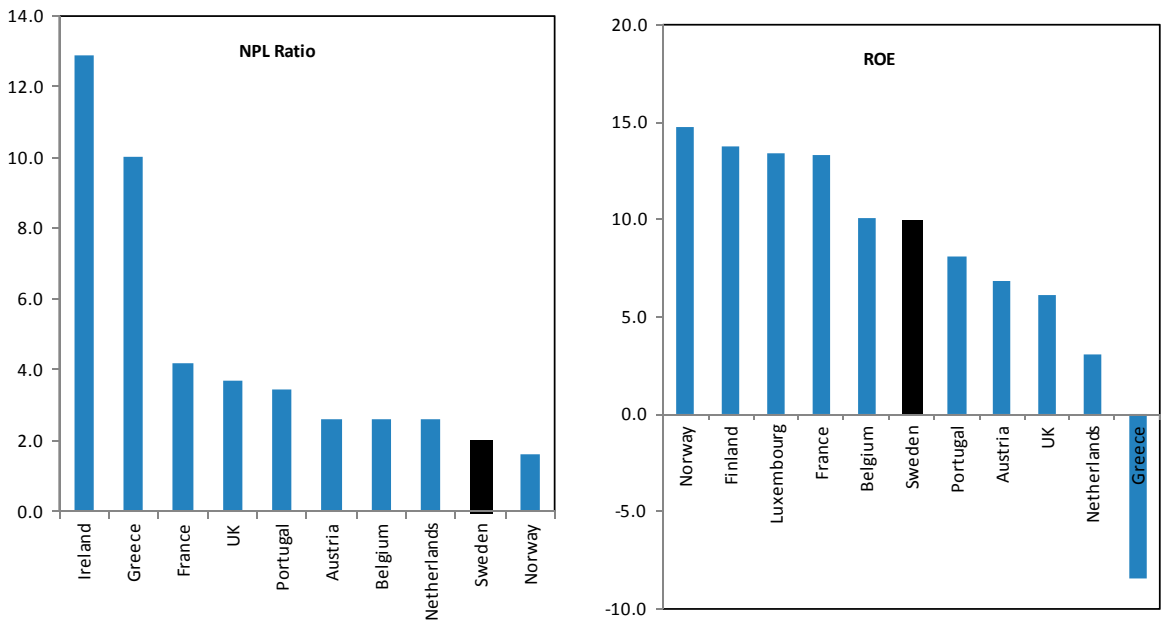


**Figure 3. Sweden: Financial Soundness Indicators in Cross-Country Comparison, 2010**

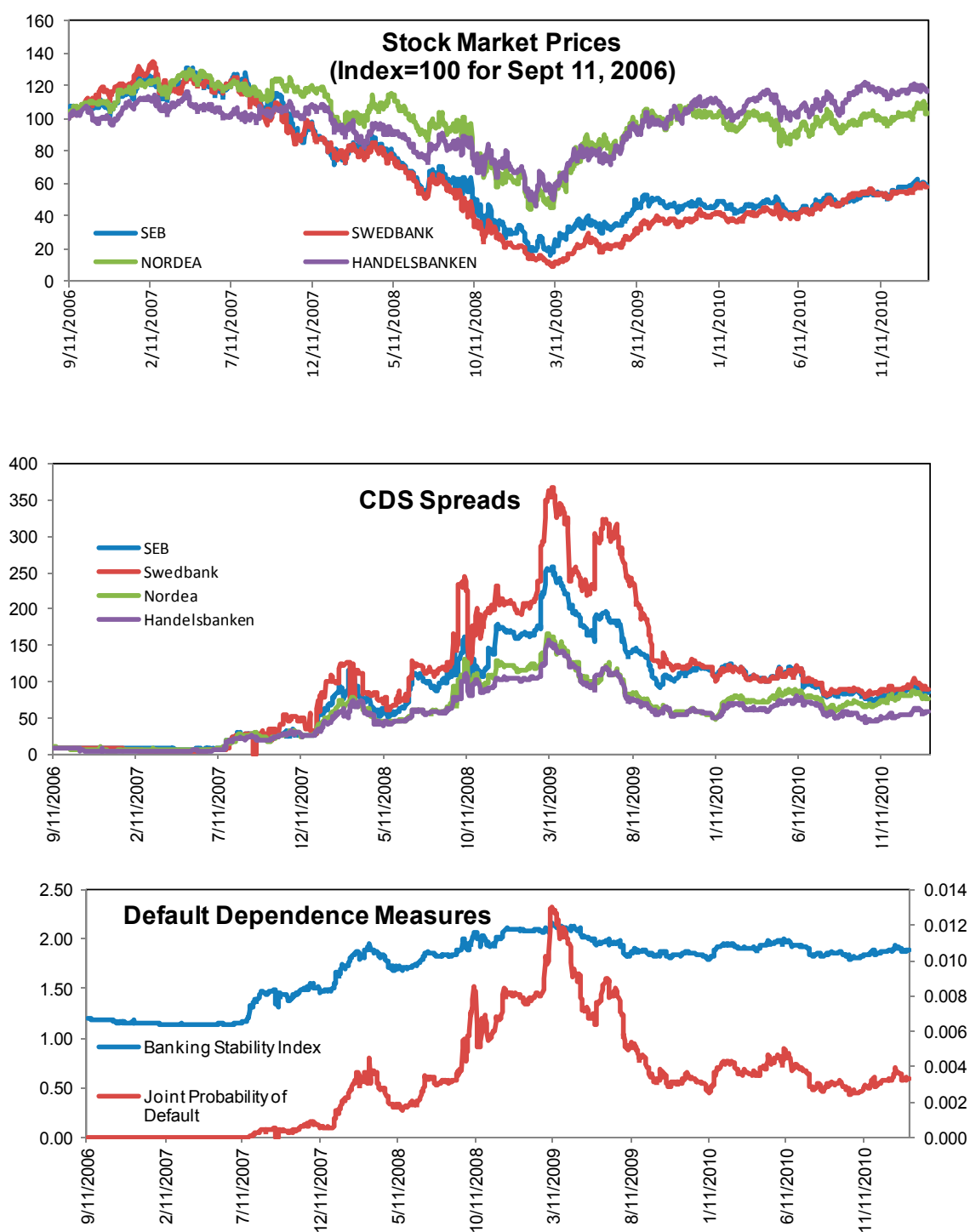
*Capital Adequacy Ratio is comparable to other European Countries, while the leverage ratio is somewhat lower...*



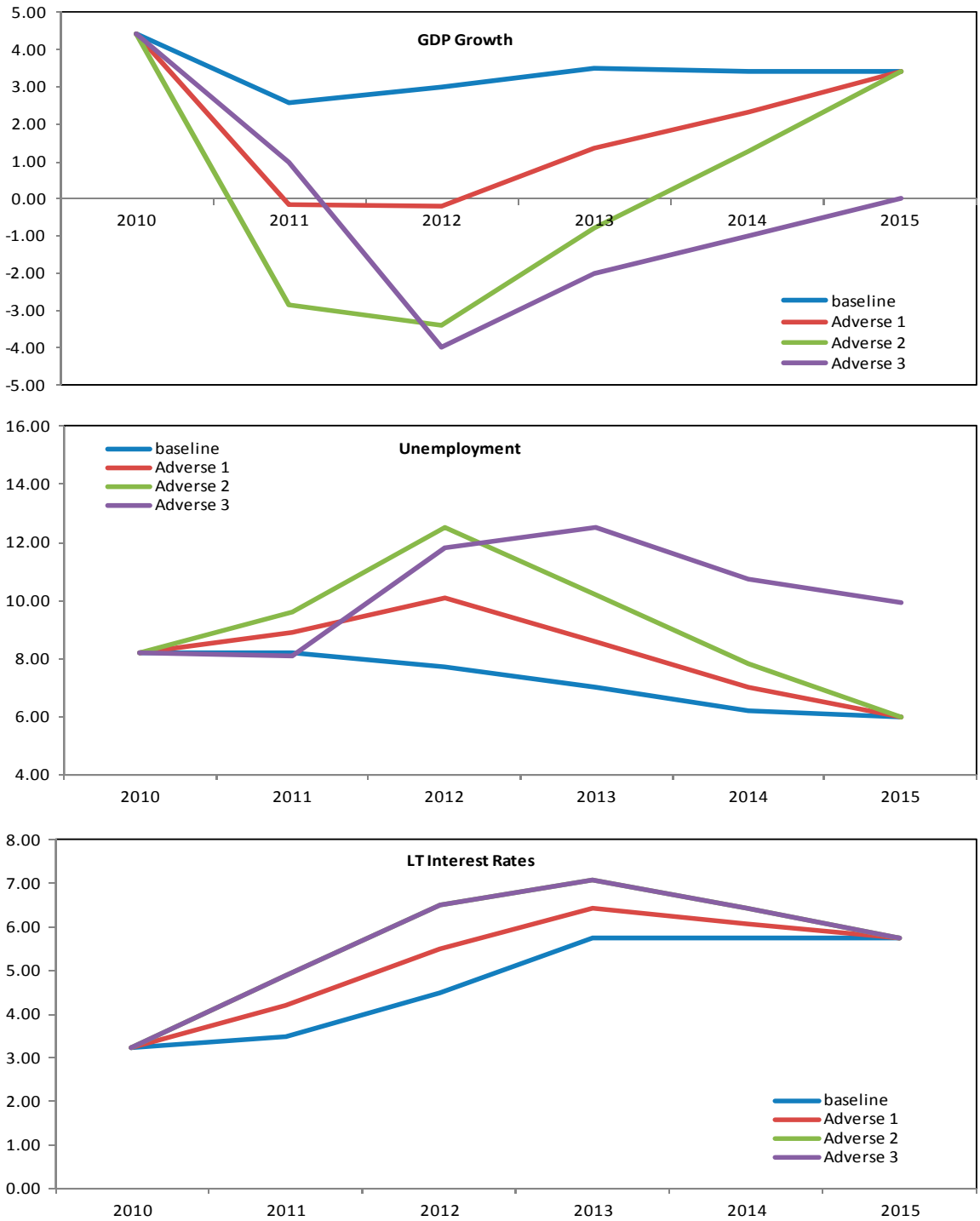
*...Asset quality is among the highest in Europe and profitability is at comparable levels.*



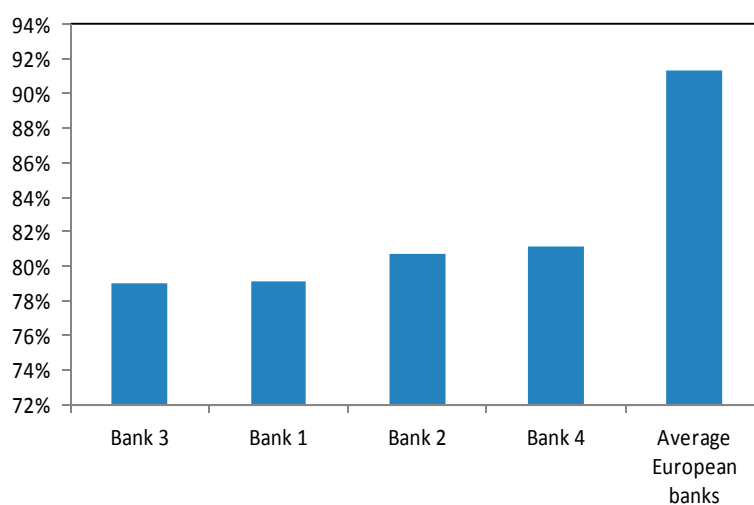
Source: GFSR

**Figure 4. Sweden: Market Indicators for the Four Major Banks, 2007–10**

Source: Bloomberg, Markit, and IMF staff estimates

**Figure 5. Sweden: Macroeconomic Assumptions in Macro Stress Tests**

Source:Riksbank and IMF staff estimates

**Figure 6. Sweden: Structural Liquidity Stress Test Results**

Notes: The figure shows a ratio similar to the Net Stable Funding Ratio (NSFR) proposed by Basel III, relating the weighted average of liabilities to the weighted average of assets. The weights are based on the stability of funding and liquidity of assets. The market was assumed to undergo a one-year stress in this case.

Source: Riksbank.

## ANNEX—OBSERVANCE OF FINANCIAL SUPERVISION STANDARDS AND CODES— SUMMARY ASSESSMENTS

This Annex contains the summary assessments of standards and codes in the financial sector. The assessment has helped to identify the extent to which the supervisory and regulatory framework is adequate to address the potential risks and vulnerabilities in the financial system.

The following detailed assessments were undertaken:

- Basel Core Principles for Effective Banking Supervision—by Keith Bell (consultant) and Katharine Seal (IMF/MCM).
- The IAIS Insurance Core Principles—by Shu Hoong Chang (consultant).
- The IOSCO Principles and Objectives of Securities Regulation—Richard Britton (consultant)
- The CPSS Core Principles for Systemically Important Payment Systems—Tom Kokkola (European Central Bank)
- CPSS-IOSCO Recommendations for Central Counterparties—Philippe Troussard (Banque de France)

Sweden's compliance with the international supervisory standards is generally high, and many of the issues raised in the 2002 assessment have not been addressed.

### A. Basel Core Principles for Effective Banking Supervision

#### Summary, key findings, and recommendations

1. **The banking supervisory framework and its implementation in Sweden are in line with many of the Basel Core Principles' essential criteria.** Since the advent of the global financial crisis, FI has instituted a more robust supervisory approach, which has made important advances on the previous regime and initiated a number of fruitful projects but which needs continued technical development. Nonetheless, FI's overall capacity to supervise banks, despite a consistent risk-based approach, is chiefly impacted by an acute staffing shortage. FI is established as a government authority responsible to the MOF. In practice, the assessors found evidence of impairment of FI's operational independence through the mechanism of the annual appropriations letter process. FI's ability to discharge its supervisory and oversight functions adequately and effectively is significantly impaired by the coupling of inadequacy of independence and resource. It is suggested that staffing levels at FI are an urgent concern to be remedied as soon as possible and also that a revised legal structure ensuring greater independence of FI be considered.

## Information and methodology used for assessment

2. **This assessment of the current state of the Swedish implementation of the Basel Core Principles for Effective Banking Supervision (BCP) has been completed as part of a Financial Sector Assessment Program (FSAP) Update undertaken by the International Monetary Fund (IMF) in March 2011, and reflects the regulatory and supervisory framework in place as of the date of the completion of the assessment.** An assessment of the effectiveness of banking supervision requires a review of the legal framework, both generally and as specifically related to the financial sector, and detailed examination of the policies and practices of the institutions responsible for supervision.
3. **The Swedish authorities agreed to be assessed according to the Core Principles (CP) Methodology issued by the Basel Committee on Banking Supervision (Basel Committee) in October 2006.** The current assessment was thus performed according to a revised content and methodological basis as compared with the previous BCP assessment in 2002. The assessment of compliance with each CP is made on a qualitative basis to allow a judgment on whether the criteria are fulfilled in practice. Effective application of relevant laws and regulations is essential to provide indication that the criteria are met.
4. **To assess compliance, the BCP Methodology proposes a set of essential and additional assessment criteria for each principle.** The essential criteria (EC) are the only elements on which to gauge full compliance with a core principle. The additional criteria are suggested best practices against which the Swedish authorities have agreed to be assessed. Additional criteria are commented on but are not reflected in the grading. The assessment of compliance with each principle is made on a qualitative basis. A four-part grading system is used: compliant; largely compliant; materially noncompliant; and noncompliant. This is explained below in the detailed assessment section.
5. **The assessment team reviewed the framework of laws, rules, and guidance and held extensive meetings with officials of FI, and additional meetings with the Riksbank (RB), the MOF and banking sector participants.** The team met the industry association representing banks in addition to a number of domestic and nondomestic institutions.
6. **The team appreciated the very high quality of cooperation received from the authorities.** The team extends its thanks to staff of the authorities who provided excellent cooperation, including extensive provision of documentation, at a time when many other initiatives related to domestic, European and global regulatory initiatives are in progress.
7. **The standards were evaluated in the context of the Swedish financial system's sophistication and complexity.** It is important to note that Sweden has been assessed against the BCP as revised in 2006. This is significant for two reasons: (i) the revised BCP have a heightened focus on risk management and its practice by supervised institutions and its assessment by the supervisory authority; and (ii) the standards are evaluated in the context of a financial system's sophistication and complexity.

8. **An assessment of compliance with the BCPs is not, and is not intended to be, an exact science.** Reaching conclusions required judgments by the assessment team. Banking systems differ from one country to another, as do their domestic circumstances. Furthermore, banking activities are undergoing rapid change after the crisis, prompting the evolution of thinking on and practices for supervision. Nevertheless, by adhering to a common, agreed methodology, the assessment should provide the Swedish authorities with an internationally consistent measure of the quality of its banking supervision in relation to the revised Core Principles, which are internationally acknowledged as minimum standards.

9. **To determine the observation of each principle, the assessment has made use of five categories: compliant; largely compliant, materially noncompliant, noncompliant, and non-applicable.** An assessment of “compliant” is given when all essential criteria are met without any significant deficiencies, including instances where the principle has been achieved by other means. A “largely compliant” assessment is given when there are only minor shortcomings, which do not raise serious concerns about the authority’s ability to achieve the objective of the principle and there is clear intent to achieve full compliance with the principle within a prescribed period of time. A principle is considered to be “materially noncompliant” in case of severe shortcomings, despite the existence of formal rules and procedures and there is evidence that supervision has clearly not been effective, the practical implementation is weak or that the shortcomings are sufficient to raise doubts about the authority’s ability to achieve compliance. A principle is assessed “noncompliant” if it is not substantially implemented, several essential criteria are not complied with, or supervision is manifestly ineffective. Finally, a category of “nonapplicable” is reserved (though not used) for those cases that the criteria would not relate to the Swedish authorities.

10. **For completeness’ sake, it should be noted that the ratings assigned during this assessment are not necessarily directly comparable to the ones assigned in terms of an FSAP performed using the pre-2006 BCP Methodology.** Differences may stem from the fact that the bar to measure the effectiveness of a supervisory framework was raised by the 2006 update of the BCP Methodology, as well as by lessons drawn from the financial crisis that may have a bearing on supervisory practices.

### **Institutional and macroeconomic setting and market structure—overview<sup>20</sup>**

11. **The Swedish financial sector is large relative to GDP and the banking sector is highly concentrated.** The financial system’s assets account for 550 percent of GDP, of which 65 percent belong to four systemic banking groups. There are over a hundred regulated banking entities in the nonsystemic sector, but taken in aggregate the secondary banking sector represents at least 25 percent of the domestic system (FI estimate).

12. **The structure of household savings in Sweden has implications for banks’ ability to meet the forthcoming Basel standards on liquidity.** Trusts and pensions have developed

---

<sup>20</sup>In FSAP/FSSA reports, this information will be contained in other parts of the FSAP report. Salient details, however, may be briefly restated for convenience.

into significant vehicles for household savings, reflecting a relatively lower level of domestic deposits in the Swedish banking system. This feature of the banking market, coupled with a low level of sovereign debt issuance, means that banks may face higher challenges than in other jurisdictions in meeting the recently agreed Basel III liquidity framework which places emphasis on the presence of a stable retail deposit base and on **stocks** of high quality liquid assets, ideally government debt instruments. FI is monitoring the situation closely. It has intensified supervision of liquidity risk management, revised liquidity risk management standards (based on Basel and EU available guidelines), is in the process of trialing revised liquidity reporting requirements and undertaking a major review of liquidity practices across a broad segment of the banking market. Basel has now signaled that it recognizes that changes may be needed to its liquidity framework, but FI needs to remain alert to potential need to encourage structural changes to banks' balance sheets.

**13. The capitalization of the Swedish banking sector is strong following the crisis.**

The four major banks are well capitalized with a capital adequacy ratio (CAR) of 12.2 percent in part due to major rights issues in 2008 and 2009. Banks' profits rebounded from 2009 lows and retained earnings continue to support banks' capitalization. Profits declined in banks with Baltics exposures due to substantial increases in loan loss provisions. Most provisions were booked in 2009 and further reversals are expected owing to improved macro conditions in the Baltics.

**14. All the large banks have operations within the life insurance sector, whilst many of the large insurance companies have banks of their own.** Some of the banking and insurance groups exhibit a complex structure. As an integrated regulator FI is responsible for banking and insurance supervision. These supervisory functions are **organized** into sector specific divisions. The advantage of FI's chosen structure is the capacity to ensure a focus on the banking and insurance risks in the respective divisions. The challenge that FI must manage is to ensure that there is sufficient management resource available to assess the interaction of banking and insurance risks within the same financial conglomerate and to avoid silo thinking.

**15. Sweden is a regional banking hub.** Its significance rests more in its role as a home than as a host jurisdiction but as fewer than half of the consolidated assets of the systemic groups are located in Sweden it has a critical role to play in ensuring the financial stability of the region. Sweden has responded actively to the challenges of its position. FI was one of the earliest jurisdictions to establish colleges of supervisors, well ahead of requirements in EU law and guidelines. Sweden has also been a path breaker in agreeing a multilateral memorandum of understanding (MOU) on cross border financial stability, crisis management and resolution with its peers in the Nordic/Baltic region. Work is at early stages of making concrete proposals across a range of issues, from identification of systemically important groups to resolution, monitoring and burden sharing. In the narrower field of supervisory colleges, FI's experience in college matters makes it well placed to harness the colleges to develop a broader and deeper understanding of the banking groups' risk profile. FI, notably, sees colleges as an active participatory process in order to achieve a shared risk assessment



not merely information exchange. The success of college arrangements is work in progress for all supervisory authorities, but Sweden is particularly well placed in this respect.

**16. Initiatives both at the Basel Committee and European level have influenced and contributed to the enhancement of the way FI conducts its supervision.** Basel II, including Pillar II, has been implemented in Sweden through the Capital Requirements Directive (CRD) and FI has used this framework as a basis to critically assess both the systemic banking groups and the nonsystemic institutions.

**17. Historically the Swedish model has been to rely on a collegiate, consensual approach to many of its supervisory interactions.** There has been a high degree of trust that institutions will rectify matters as and when deficiencies are pointed out to them, which has not always been the outcome in practice. FI is currently tackling the transition challenge of moving to a more assertive approach, more disciplined and formal in follow up, while retaining a mature and constructive dialogue with the supervised entities.

## **Preconditions for effective banking supervision**

### ***Sound and sustainable macroeconomic policies***

**18. The Swedish economy enjoyed an extended period of strong growth between 2002–2008, before being affected by the global financial crisis.** The economy exited from recession in mid-2009 and the severely affected financial and industrial sectors have recovered. Unlike in other countries, housing prices were resilient in the downturn. Macroeconomic developments have been favorable, but macro financial risks remain, including the degree of reliance on wholesale funding within the banking sector. GDP growth rebounded strongly and is projected to grow 2.5–3 percent in 2011–2012. Public finances are among the strongest in advanced economies, with the fiscal balance projected to return to a surplus by 2012. The financial system has been stabilized, showing increases in banks' capital positions and lower loan losses. Improved market conditions have enabled the authorities to begin to exit from crisis response measures since April 2010.

### ***A well-developed public infrastructure***

**19. Overall, the public infrastructure supporting effective banking supervision is well developed in Sweden.** New cooperation arrangements were established in the financial crisis between the domestic authorities—ministry of finance (MOF), RB, FI, and the Swedish National Debt Office (SNDO)—to support financial stability. The experience of cooperation and information exchange in the crisis was positive although some gateways for exchange of information (e.g., with the SNDO) are yet to be fully opened and greater formalization of concrete cooperation practices outside of crisis periods.

**20. The Swedish legal system is based on civil law.** The Swedish constitution establishes the independence of the courts. The general courts deal with criminal and civil actions while the general administrative courts are responsible for cases concerning public administration, including proceedings concerning financial regulation and regulation. State

Aid to financial institutions is taken before a special Appeals Board specifically established for that purpose. As a member of the EU, much domestic legislation, including banking regulation, derives from EU regulations, directives and decisions which are frequently updated to keep pace with international standards.

21. **The principle of transparency is fundamental to Sweden.** In principle all information that is collected by or communicated from a public Swedish authority is open for everyone to see. If, for some reason, the information shall not be disclosed, an explicit decision has to be made, stating on what legal ground the “default option”, (i.e., openness, should not prevail in that specific case. The Public Access to Information and Secrecy Act of 2009, to which FI is subject, governs disclosure and confidentiality provisions.

22. **Sweden has implemented IFRS.** There is a full range of high-quality accountancy, audit, legal, and ancillary financial services available in the jurisdiction.

### *Effective market discipline*

23. **The principle of disclosure and transparency is well established in the Swedish context.** In addition, with respect to the banking and financial sector, transparency is supported by the application of the “Pillar 3” disclosure framework of the Basel Capital Accord, which has been implemented in Sweden through the relevant EU legislation (CRD). The public statement on FI’s website states that it discloses as much information as possible in order to give the public insight into what is happening on the financial market, but that it does not, however, disclose sensitive information that can affect a firm’s competitive positioning on the market. FI also issues, on a regular basis, reports assessing and describing the risk environment. The RB publishes a biannual financial stability report.

### *Financial sector safety net*

24. **Deposit insurance was introduced in Sweden in 1996 in conformity with the EU directive on deposit guarantee schemes.** Since the end of 2010, deposits in credit institutions are protected to the maximum limit of €100, 000. Since the introduction of the scheme there have been few failures in Swedish institutions leading to a payout, two in 2006 when the scheme was administered by the now disbanded Deposit Guarantee Board and one in 2010. The scheme has been managed by the SNDO since 2008. Currently, payout under the deposit insurance scheme is triggered only when the institution is placed into bankruptcy. Although the FI can revoke a license, it cannot place an insolvent institution into bankruptcy. The deposit protection scheme plays no role in bank restructuring and is funded ex ante according to a fee structure that is sensitive to the capital adequacy strength of the individual institutions making the contribution. Deposits made to deposit companies pursuant to the Deposits Business Act are not covered by the deposit protection scheme. The deposits that can be made to such companies are limited to SEK50, 000 per individual.

25. **Crisis measures to protect the stability of the banking system were largely based on the 2008 Government Support to Credit Institutions Act.** Specific measures included debt guarantee, recapitalization, and bank takeover. As a state-aid measure the Act and the

programs based on it were subject to scrutiny by the European Commission. In April 2010 the authorities began to exit from crisis-response measures. Banks participating in the support schemes were subject to restrictions on remuneration to senior management. Additionally, the RB implemented a sweep of new liquidity measures through expanding its balance sheet, and took a number of measures to support banks' capital and assure markets. At the same time, the SNDO borrowed externally to boost international reserves, and the RB established swap facilities with the U.S. Federal Reserve and ECB.

## **Main findings**

### ***Objectives, independence, powers, transparency, and cooperation (CP 1)***

26. **FI needs operational independence in being able to set its priorities, make day to day decisions, allocate resources, and to establish a supervisory strategy with a long term horizon.** The annual appropriations letter can be amended with updated requests during the year contains tasks and priorities for FI, thus introducing a degree of uncertainty or even directly impeding FI's ability to plan and execute a supervisory program. The minister of finance can also (albeit indirectly) influence FI through the rather cumbersome budgetary process. A more straightforward process, for example, where FI levies fees and uses these to finance its own budget directly may be worthy of consideration. The government ministry could subsequently oversee the efficiency and budgetary performance of FI.

27. **Legislation creates the possibility for government involvement in or control of supervisory decisions, even though such powers have rarely been used.** If the matter involves a matter of principle or particular importance the government and not FI must make the licensing decision. The government is also empowered to make a wide range of decisions, regarding matters such as intervention, sanctions or revocation, when FI refers the matter to it because there is a matter of principle. Legislative changes to ensure that FI is the sole responsible authority for supervisory decisions are recommended.

28. **Resources have increased at FI over the course of the last five years but there are material concerns that FI is still too resource constrained to deliver effective minimum levels of supervision and owing to the appropriations process lacks independent means to redress this deficiency.** Many areas of FI's supervisory operations, ranging from depth and intensity of supervisory actions (e.g., on-site inspections), ability to launch proactive investigations, enhance timeliness of follow up on remedial action and ability to ensure a sufficiently high level of supervision for the secondary banking market, which represents nearly one third of the banking sector in terms of domestic loans to the public, shows signs of severe resource strain. The forthcoming international regulatory agenda will only add to FI's burdens.

29. **In general, the Swedish approach is highly transparent and lines of accountability are clearly set out.** FI's mandate, with the twin objectives of financial stability and consumer protection, is expressed at a very high level. Prudential objectives are not stated explicitly, however, and notwithstanding the issuance of the annual appropriations

letter which states specific tasks and objectives for the year, it is not clear how FI is expected to balance between the priorities and demands of these objectives.

**30. Regulatory decisions made by FI, for example its use of remedial powers, its sanctions, its power of revocation are subject to challenge and reversal in court.** The right of appeal is an important component of any legal framework and the grounds for appeal are set at a high level. However, the element of legal and regulatory uncertainty can impede the effectiveness of FI's intervention efforts and potentially exacerbate the management of a crisis situation as decisions cannot be applied until a court has provided its ruling, allowing claimants to delay and thus frustrate the purpose of FI's interventions and potentially reduce FI's incentives to employ its powers. An alternative method of satisfying the right to appeal by an institution or individual needs to be found in order to remove such uncertainties.

**31. There is no direct or explicit protection afforded to FI or its staff against liability for actions and omissions in discharging their duties and this should be remedied.** The assessors recognise that the thresholds for successful legal action are set at a high level and that the cultural environment of Sweden is not strongly litigious, unlike that in some other jurisdictions, but business culture can change over time, and an international market such as Sweden is exposed to this risk. The legal framework should be amended to include legal protection for supervisors (as per BCP principle 1), namely legal immunity for both the authority and individual staff and indemnity for legal fees for both sets of parties with a small carve out for gross negligence/misconduct.

**32. Sweden has extensive gateways for information sharing, domestic and nondomestic, that are complemented by a network of arrangements, MOUs and colleges.** There are gateway provisions for the exchange of information between the principal domestic authorities with any responsibilities with respect to financial stability. When Sweden implements the revision to the EU CRD (CRD2) it will at that time widen and reinforce its gateways for information exchange both between supervisors (domestic and non domestic) and other relevant domestic authorities, particularly in respect of crisis management situations. During the financial crisis, Sweden enhanced its domestic cooperation practices and the challenge is to ensure that open and effective communication and information exchange remains in place now that the peak of the crisis is passed.

### ***Licensing and structure (CPs 2–5)***

**33. In the main, licensing and structure are given appropriate treatment under Sweden's regulatory regime,** although there are areas where adjustments are recommended.

**34. Overwhelmingly, deposit taking is located in entities licensed by, and subject to, the supervision of FI.** However, deposits can also be taken by "deposit companies" operating under the Deposits Business Act and while deposits per customer are limited to 50,000 SEK they are not covered by the deposit guarantee scheme. This presents an unnecessary reputational risk to FI and also a risk to customers' own interests as such

“deposit companies” are registered by FI but not supervised by it although there are limited reporting requirements and the companies are subject to AML requirements also.

**35. While FI’s close relationship with market participants reportedly enables it to obtain its objectives either via pressure or the desire of participants to keep it informed, basic statutory underpinnings are to be preferred.** In these regards, granting FI the power to assess the fitness and propriety of all members of senior management, rather than only the CEO and his/her deputy would be constructive is necessary (CP 2). Similarly, FI should have the statutory power to revoke a license obtained through deception or other irregularity and firms should be obliged by statute to notify FI forthwith upon learning of any material information that may negatively affect the suitability of a major shareholder.

**36. Potentially, there is ample room for acquisitions/investments by credit institutions to occur without FI having the opportunity to comment.** While licensees’ desire to keep FI informed may work in its favour, the quantum limit above which FI’s approval for an investment/acquisition is required is in excess of 25 percent of the investors capital base. Investments below the threshold may be made without informing FI either before or after the fact. Consideration should be given to requiring FI’s prior approval for investments in subsidiaries, over to be determined threshold, and after the fact notification.

#### *Prudential regulation and requirements (CPs 6–18)*

**37. There are a range of issues that need to be addressed, some with urgency, with respect to a number of individual risk areas.** In addition it may be noted that FI’s capacity to determine the quality of institutions’ own oversight and management of their key risk areas is significantly constrained by limits on its own resources. This factor needs to be borne in mind when assessing the degree of compliance with this group of principles, but it is important also to recognize that resource constraint is not the sole and is not the determining factor driving these assessments. Aside from that, FI has prioritized between major risk factors for the Swedish banking system and it has launched a number of initiatives to improve its understanding and industry practice in some key areas, notably liquidity, trading book valuations and operational risk.

#### *Methods of ongoing banking supervision (CPs 19–21)*

**38. The overall supervisory approach is based on a risk based process that acts as an effective method of resource allocation but needs further analytical development.** FI does not have a formalised, analytical risk framework that might be used to assess the risk profile of an institution. At present supervisory effort focuses on the supervisory review evaluation process, a technique designed to assess capital adequacy. The assessors are satisfied that FI takes a broader approach to risk analysis and supervisory practice than pure capital adequacy, but the SREP needs to be developed and supplemented to ensure that other risks (e.g., environmental—such as economic and competitive environments; business model risks and controls; oversight and governance risks) are fully and systematically assessed, including forward looking elements. FI is developing further analytical tools for monitoring

smaller firms and with respect to credit risk (internal ratings). These developments are welcome and can be built into a more formal overarching analytical framework.

39. **Lack of resource is a severe and damaging constraint upon FI.** As FI recognises, it needs to be able to spend more time on site with institutions, both systemic and nonsystemic, deepening its understanding and challenging firms as appropriate. Supervisors' capacity to assess the dimensions of risk facing firms is presently undermined by limitations on the frequency, duration and intensity of supervisory interactions that are possible.

40. **FI must strike the right balance in allocation of time and attention between systemic banks and the secondary banking sector.** The challenge is to ensure that there is an effective minimum level of supervision for the secondary banking sector which in aggregate represents a significant proportion of the banking system. FI should carefully reconsider whether it has achieved the right balance at this time.

#### *Accounting and disclosure (CP 22)*

41. **FI does not have the power to reject and rescind the appointment of an external auditor.** While FI can often achieve this objective through putting pressure on an institution's Board, it would be preferable to have an unfettered power to rescind appointment of an external auditor.

#### *Corrective and remedial powers of supervisors (CP 23)*

42. **At a broad level FI has a range of corrective and remedial powers.** However, there are gaps and limitations in FI powers. With respect to sanctions and penalties on individuals, FI has only the power to remove or bar an individual from the Board or position of managing director. FI cannot remove senior management, only the Board or managing director. Thus although FI has some influence, more direct intervention powers would be more efficient and lead to more timely outcomes.

43. **FI's powers of sanction and decision making can be affected by uncertainty created by the legal process.** The uncertainty affects intervention but also has wider consequences for bank resolution although resolution issues fall outside of the scope of the BCP assessment. Under the Swedish system, liquidation of a nonsystemic bank is triggered by a revocation decision, but the revocation decision itself can be overturned, as can any FI sanction. The liquidation may be suspended pending outcome of appeal. The legal uncertainties inhibit a clear and predictable outcome for a firm as well as FI's ability to plan a course of supervisory action involving sanction. A robust and flexible early-intervention framework that would provide the supervisory and resolution authorities with the tools and mandate to intervene and resolve ailing institution at an earlier stage, and resolving the legal concerns identified, is needed.

### *Consolidated and cross-border banking supervision (CPs 24–25)*

44. **FI practices consolidated supervision according to the EU legislative framework.** FI applies its prudential standards on a consolidated basis and makes determinations on the oversight of the group through a mix of regular college meetings and periodic on-site visits to firms. However, FI does not have direct powers to impose its prudential standards on nonfinancial (and nonmixed activity) parent companies of credit institutions. Although this is not a current issue, new corporate structures or banking groups could emerge over time and it would be advisable to consider if regulations should go beyond the EU banking directives governing and extend scope of application of FI powers to holding companies.

45. **FI has an extensive network of MOUs and arrangements with other home or host supervisors supported by a gateways for information exchange and confidentiality provisions.** Sweden is the home jurisdiction to four systemically significant banking groups for the Nordic region, one of which is considered to be globally systemic. At the same time Sweden is host to 45 foreign branches. On balance, however, Sweden's role as a home supervisory authority is more significant than as a host authority but the potential for spill over of risks could be both inward and outward. Home-host arrangements are therefore critical and FI has a clear ambition to ensure that information exchange serves as the first step towards a deeper and broader understanding of a banking group's activities and risk profile by all relevant supervisors. In other words information exchange is not seen as an end in itself but as it serves the purpose of more meaningful and effective supervision. Progress would benefit from increased time spent on-site visits to host/home jurisdictions, although this option is limited by current resource constraints.

**Table 1. Sweden: Summary Compliance with the BCP—Detailed Assessments**

Core Principle	Comments
1. Objectives, independence, powers, transparency, and cooperation	
1.1 Responsibilities and objectives	Statutory regulatory and supervisory mandates are open to interpretation and lack clarity with respect to how prudential objectives should be balanced with consumer protection objectives. FI has been able to move into a more proactive and where possible intrusive approach to supervision without change to its overarching mandate.
1.2 Independence, accountability and transparency	FI's effectiveness may be compromised by the annual appropriation letters from the government. Resources are constrained to the extent that they are compromising FI's ability to deliver effective minimum standards of supervision. Both FI and the government have powers to issue or withdraw a banking licence or decide upon revocation thus creating the possibility for the government to be involved in institution-specific supervisory issues such as licensing.
1.3 Legal framework	FI is compliant with this criterion; please note comments under CP 1(2) however.

1.4 Legal powers	Regulatory decisions made by FI, for example its use of remedial powers, its sanctions, and its power of revocation are subject to challenge and reversal in court. The grounds for appeal are set at a high level but the element of legal and regulatory uncertainty is an impediment to effective supervision.
1.5 Legal protection	There is no direct or explicit protection afforded to FI or its staff against liability for actions and omissions in discharging their duties.
1.6 Cooperation	No comments.
2. Permissible activities	Deposit taking is not reserved for entities licensed and subject to supervision as banks.
3. Licensing criteria	The FI does not have power to assess fitness and propriety of <u>all</u> members of senior management (EC 8). Obtainment of a license through false information or other irregularity is not in itself sufficient grounds for FI to revoke the CI's license. This is a weakness in the statutory provisions.
4. Transfer of significant ownership	It would be constructive for CIs to be obliged to notify FI forthwith upon learning of any material information that may negatively affect suitability of a major shareholder.
5. Major acquisitions	Notification limit is set at more than 25 percent of the CI's capital base, which gives broad latitude for acquisitions/ investments to escape FI's review. Except for the obligation to notify FI about an acquisition made to secure a claim, there are no requirements to notify FI even after an acquisition/ investment. Moreover, there are no precise legal criteria or supervisory guidelines by which to judge even individual proposals that must first be referred to FI for prior approval.
6. Capital adequacy	No comments.
7. Risk management process	Too great an emphasis is placed on the existence of policies and processes and insufficient weight placed on corroborating actual risk management practice in institutions.
8. Credit risk	No comments.
9. Problem assets, provisions, and reserves	The quality of information obtained by FI is questionable. FI is not in a position to robustly determine the quality of process, policies, classification and controls within even its major firms.
10. Large exposure limits	More granular reporting of exposures from the major institutions in particular (applied in the crisis but subsequently withdrawn) would be advisable.
11. Exposure to related parties	FI is relying on general requirements to address related party exposures. Although supervisory review has identified breaches in banks on this issue, more specific requirements are needed.
12. Country and transfer risks	Country and transfer risk is increasingly important for Sweden given the cross border activities of the systemic players. Close monitoring of exposures is warranted.



13. Market risks	Although market risk is not considered to be a major risk in the overall banking sector, the failure of at least one bank has been attributable to trading book weaknesses. The FI is not in a position to robustly determine the quality of process, policies, limits and controls within even its major institutions. Timeliness in following up on identified concerns has been weak although recently launched initiatives ought to deliver significant strengthening in this risk area.
14. Liquidity risk	Liquidity risk supervision has been very weak and is in the course of major revision. FI has been devoting effort into revising liquidity risk management standards, liquidity reporting as well as launching a major project to assess the quality and implementation of liquidity risk policies across institutions and an additional review targeted at systemic institutions on liquidity pricing risk. Continued progress, as planned, is required at a minimum.
15. Operational risk	Emphasis placed on operational risk is not strong as for some other risk areas. This is exemplified by the lack of guidance to firms with respect to operational risk.
16. Interest rate risk in the banking book	No Comments.
17. Internal control and audit	Regulations are deficient with respect to setting clear obligations for a firm to inform FI of material information that may negatively affect the fitness and propriety of a Board member or a member of senior management. Note that there are also deficiencies with respect to regulations concerning internal control regarding FI's lack of power to require changes in the senior management of an institution other than the CEO/Deputy CEO (assessed under CP23). It is noted that there have been nine (9) on-site examinations with an Internal Control theme in the three years to December 31, 2010. Where Internal Audit is addressed as part of a themed inspection with another focus, it is not clear from inspection reports that this was done.
18. Abuse of financial services	CIs are not obliged to implement screening procedures to ensure high ethical and professional standards when hiring staff and nor are they required to report to FI suspicious activities and incidents of fraud material to their safety, soundness or repute.
19. Supervisory approach	The existing risk based framework needs to be enhanced and supplemented by a formalization of a risk-based methodology.
20. Supervisory techniques	Balance of on-and-off site supervision has not been achieved. Severe weakness in this area has contributed to deficiencies in the compliance in seven risk and risk control aspects of the CP and the individual and cumulative force of these weaknesses are assessed here. More resource needs to be available to on-site inspection across systemic and nonsystemic institutions.
21. Supervisory reporting	FI resources are wasted by frequent incidents of misreporting. FI's on-site inspection program is modest and rarely includes validation of the accuracy of supervisory reporting. The Standard Report would benefit from addition of a breakdown of exposures to related parties.
22. Accounting and disclosure	The FI does not have power to reject or rescind the appointment of an external auditor (EC 6).

23. Corrective and remedial powers of supervisors	FI has only the power to remove or bar an individual from the Board or position of managing director. FI cannot remove senior management, only the Board or managing director. There is uncertainty surrounding the sanctions and revocations process due to the manner in which the appeals process is designed. Possibility of appeal and redress without overturning a decision of revocation should be achieved.
24. Consolidated supervision	Widening the legal framework to ensure FI powers are applicable to bank holding companies should be considered.
25. Home-host relationships	No comments.

**Table 2. Sweden: Recommended Action Plan to Improve Compliance with the Basel Core Principles**

Reference Principle	Recommended Action
1.1 Responsibilities and objectives	FI should articulate how it interprets its mandate including how it would respond in the event that a conflict should arise between acting on the basis of consumer protection or financial stability.
1.2 Independence accountability and transparency	Ensure operational and legal independence of FI. Remove duality of powers of FI and government to determine licensing and revocation. Review scale of funding and funding model for FI.
1.4 Legal powers	Identify and implement alternative legal options that are compatible with the right of appeal and redress to ensure that FI is able to deliver a regulatory decision or sanction, such as revocation, without the risk of the decision being overturned by the courts.
1.5 Legal protection	Establish direct or explicit protection to FI and its staff against liability for actions and omissions in discharging their duties when acting in good faith.
2. Permissible activities	Deposit taking should be permitted only to those entities licensed and subject to supervision as banks.
3. Licensing criteria	The FI should have power to assess fitness and propriety of <u>all</u> members of senior management. Revise the statute to provide power to revoke a license determined to have been obtained by deception.
4. Transfer of significant ownership.	Amend regulations to create the obligation for firms to notify FI forthwith upon becoming aware of any material information that may negatively affect the suitability of a major shareholder.
5. Major acquisitions	Laws or regulations should provide precise criteria by which to judge individual proposals. Prior notification requirement should be expanded, including establishing specific thresholds, and after-the-fact notification.
7. Risk management process	Ensure focus is placed on corroborating firms' risk management practices rather than whether policies and processes are formally in place.
9. Problem assets, provisions and reserves	Ensure adequacy of information on quality of assets from firms.
11. Related parties	Consider developing more explicit rules. Ensure adequate supervisory focus in the context of reviews.
13. Market risk	Continue with current initiative on trading book valuation. Ensure that findings inform future supervisory practice in on site reviews, and ensure that there is feedback to internal and external auditors to enhance understanding of supervisory expectations.
14. Liquidity risk	Continue with planned implementation of liquidity initiatives and ensure that findings from the reviews are incorporated in guidance and supervisory practice.

Reference Principle	Recommended Action
16. Operational risk	Continue with development of guidance for firms and establish, to the extent possible a systematic approach to the on-site assessment of firms' practices. Ensure firms are placing sufficient emphasis on business continuity and contingency plans.
17. Internal control and audit	Remedy deficiencies in regulations with respect to obligations on institutions to inform FI of material information that may negatively affect the fitness and propriety of a Board member or a member of senior management. Where Internal Audit is included in a themed inspection with a different focus, the report should indicate the findings.
18. Abuse of financial services	CIs should be formally required to implement screening procedures to ensure high ethical and professional standards when hiring staff. The text of FFFS 2005:12 should be revised to provide for reporting of incidents of suspicious activity and high impact fraud to FI.
19. Supervisory approach 20. Supervisory techniques	Establish a formalised analytical framework for the risk assessment of firms, building on existing practices. Determine resource requirements to ensure minimum level of effective oversight in particular in respect of: risk management, credit risk, problem assets, market risk, liquidity risk, operational risk, internal control and audit. (CPs 7, 8, 9, 13, 14, 15, and 17)
21. Supervisory reporting	FI should consider demanding certification of filings by a CI's CEO or CFO and obtaining statutory authority to levy significant fines for misreporting. FI should consider requiring external auditors opining whether filings have been accurately made, with the fee being for the CI's account. The Standard Report should include a breakdown of exposures to related parties.
22. Accounting and disclosure	The FI should be granted power to reject or rescind the appointment of an external auditor.
23. Remedial action	Ensure that sanctions can be applied to senior management (in addition to Managing Director). Consider early intervention framework. Identify appropriate revisions in order to remove legal uncertainties that are created by the possibility that a revocation decision can be overturned. The ambiguity of status of a revoked institution (including liquidation issues) may lead to significant supervisory hesitation in using powers of revocation. Review levels of fines that can be applied to supervised institutions, including the removal of the existing cap of SEK 50,000, 000.
24. Consolidated supervision	Ensure that consolidated supervision powers can be applied to and enforced on a bank holding company.

## Authorities' response to the assessment

46. **The Swedish authorities welcome the assessment of the regulation and supervision of the Swedish banking sector.** We look forward to using the recommendations stated in the report to improve the regulation and supervision of the banking sector in Sweden.

47. **Generally, we share the views expressed in the assessment as well as the grading of most of the Basel Core Principles.** However, while appreciating our earlier interaction on the evaluation on the Basel Core Principle 1.2, which has been rated materially noncompliant (MNC), we do not fully share this assessment. The main reasons for this are as follow:

48. **First, it should be noted that the possibilities for the government, after referral from FI, to decide on matters concerning, e.g., licensing of a bank or revocation of a bank's license are circumscribed through provisions in law and interpretative statements in preparatory works to the law.** Moreover, in practice, such decisions have been taken by FI rather than by the government. Although the mere possibility that the government may take such decisions may be seen as unsuitable per se, it does not appear that the legal provisions as such have created legal uncertainty among the regulated entities.

49. **Further, we would like to emphasize that FI's current fee model—where fees levied by FI are passed on to the state budget—ensures that these funds are subject to parliamentary control.** The fact that these funds form part of the state budget, which is decided by the highest representatives of Swedish voters in Parliament pursuant to provisions in the Swedish Constitution, is held to be very valuable in this context. The budgetary process as laid down in the Constitution and the Budget Act has been designed to ensure sound public finances and transparent handling of public funds. Also, parliamentary control constitutes a safeguard against the risk that market actors might be perceived as having undue influence in the setting of fees.

50. **Also, assessments of supervisory authorities' independence in other FSAP's carried out in other countries during 2007 and 2008 have resulted in higher ratings in cases where the supervisory authorities were subject to government decision-making power as regards, e.g., the allocation of funds, supervisory priorities and staffing issues.**

51. **Finally, we would like to draw your attention to the fact that we are about to initiate work aiming at revising our framework and welcome you back to a new assessment in a not too far distant future.**

## B. IAIS Insurance Core Principles

### Introduction and market structure

52. **This report provides a summary of the assessment against the Insurance Core Principles (ICPs) issued by the International Association of Insurance Supervisors (IAIS) in 2003.** This assessment is based solely on the laws, regulations, and other supervisory requirements and practices that are in place at the time of assessment.

53. **The insurance sector in Sweden is well-developed and mature, with around 50 percent of households' financial assets held in life insurance products.** As at end-2010, there were 434 insurers comprising 33 life insurers, 10 unit-linked insurers, 157 nonlife insurers, 5 reinsurers, 49 captive insurers, 82 friendly societies, 97 livestock insurers and one association of underwriters. The number of licensed insurance intermediaries has increased significantly since 2006 to reach 1,044 by end-2010. Assets held by the insurance industry as at end-2009 totaled SEK 2,967 billion, representing 95 percent of GDP. Insurers were the largest investor category in the Swedish bond market with holdings totaling SEK 1,125 billion or approximately 50 percent of the amount outstanding as at end-2009.

54. **The Swedish insurance industry is dominated by a few large insurers/groups.** All major banks have insurance subsidiaries and some large insurers have their own bank subsidiaries. Notably, the number of insurance groups more than doubled from 23 to 60, as at end-2010. The five largest insurance groups accounted for approximately 50 percent of total assets as at end-2009. The top-5 life insurers accounted for 61 percent of assets of the life sector while the top-5 nonlife insurers have about 55 percent market share in terms of gross premiums in 2009. *Bancassurance* is a key distribution channel of life insurance products. Of the four large Swedish banks, three are registered as “tied intermediary”<sup>21</sup> of their related insurance subsidiaries and one is licensed as an insurance intermediary.

55. **The Swedish insurance industry offers a diversified range of products.** The bulk of the business of life and unit-linked insurers relates to pension insurance, sold both as traditional policies and ULPs.<sup>22</sup> Motor insurance is the dominant class of nonlife insurance, accounting for 22 percent of total premiums written in 2009, partly attributable to the comprehensive range of social insurance<sup>23</sup> and the increasing use of captive insurance by

---

<sup>21</sup> A tied intermediary is defined as a natural or legal person who has entered into an agreement with one or several insurers regarding the mediation of insurance products.

<sup>22</sup> ULPs are, in effect, investment products as life insurance coverage is not mandatory and policyholders bear all the investment risks.

<sup>23</sup> Social insurance is an integral part of the Swedish social security system, providing financial protection for disability, work injury, illness and old age (state pension).

large industrial groups. While foreign risks<sup>24</sup> written by life and unit-linked insurers are immaterial, foreign risks made up 34 percent of nonlife insurers' portfolio in 2009. The bulk of the foreign risks were written by foreign branches of Swedish nonlife insurers.

**56. Insurers' solvency levels were hit badly in 2008 but recovered in 2009.** Life insurers' solvency was hit badly in 2008 due to a combination of falling asset prices and a sharp fall in interest rates. While their solvency ratios have recovered somewhat in 2009, some life insurers are close to solvency intervention level and are monitored by FI closely. While the impact of the financial crisis on nonlife insurers was more moderate, their overall operating income and solvency ratio dropped in 2008. The overall solvency ratio for nonlife insurers improved in 2009 and FI's assessment is that there is only a minor solvency risk. In contrast, the solvency ratios for reinsurers and captives have been declining since 2007, and a number of captive insurers are subject to closer monitoring by FI.

**57. FI is the integrated supervisor for the financial sector in Sweden.** In respect of the insurance sector, FI supervises only private insurance business but not social insurances. FI is a central administrative authority with the mandate to promote stability and efficiency in the financial system as well as to ensure effective consumer protection. FI is accountable to the Ministry of Finance (MOF) and its annual budgets are funded by the MOF. The government is responsible for formulating and issuing financial sector legislation and regulations and may authorize FI to issue secondary regulations, only if it is specifically provided for under the relevant law or primary regulations.

**58. The key legislation governing private insurance activity in Sweden is the IBA and the Foreign Insurance Business Act (FIBA).** IBA and FIBA set out the regulatory requirements for the establishment of insurance entities, rules pertaining to their operations and the supervisory mandate of FI. The IBA is supported by implementing regulations and guidelines that elaborates FI's supervisory expectations. The Insurance Contracts Act (ICA), which entered into force on January 1, 2006, regulates the legal relationship between insurers and the insured as well as other legitimate claimants.

**59. The authorities are taking proactive measures to address the key lessons learned from the financial crisis in 2008/9.** Sweden has set up a government commission to review the lessons from the current crisis, including supervisory capacity building. In particular, the crisis highlighted that greater clarity is required on the respective roles of the various agencies for financial stability and the supervisory tools that they are empowered to use.

## **Key findings and recommendations**

**60. The Swedish regulatory framework has a high level of observance with the ICPs.** The regulatory regime is broadly in line with EU Directives governing licensing, solvency, insurance intermediaries and consumer protection. FI has also introduced the Traffic-Light

<sup>24</sup> Foreign risks are those that do not qualify as Swedish risks (i.e., risks located in Sweden or where the insurers are residents in Sweden or having a permanent establishment in Sweden).

model, a framework for stress testing, to better understand insurers' risk exposures and facilitate early intervention. FI adopts a systematic supervisory risk assessment process to prioritizing and planning supervisory activities and resources. The new IBA, which came into effect on April 1, 2011, provides broader powers to FIs to issue secondary regulations to address a number of supervisory gaps. The impending implementation of Solvency II will strengthen FI's risk-based supervision, subject to the adequacy of supervisory resources.

**61. The coverage and robustness of FI's prudential supervision should be strengthened.** FI has no legal authority to establish and assess fitness and propriety of senior management of insurers during the licensing stage and on ongoing basis. There is no regulatory requirement for insurers to report their reinsurance strategies and programs, outsourcing arrangements and off-balance sheet exposures including derivatives transactions. Supervision of insurance groups needs to be strengthened in the areas of reinsurance, risk concentrations and group risk management. It is advisable that FI formulates a risk-based supervision approach based on both the impact and probability of failure, supported by appropriate baseline supervision.

**62. There is scope for additional regulatory requirement to enhance protection of policyholders.** FI has not issued regulations or guidelines on conditional bonuses<sup>25</sup> setting out how life insurers are expected to exercise their discretion in the distribution of surplus in an equitable manner, the basis for computing technical provisions and related disclosures to policyholders. As the possibility of transferring policies by policyholders has increased in recent years, it is timely to review whether existing regulatory measures are adequate to ensure that policyholders are given proper advice in their best interests.

**63. The authorities are advised to review the continued involvement of the government in institution-specific supervisory issues.** The IBA explicitly provides for government's involvement in institution-specific issues such as license approval or revocation, issuing reprimands or imposition of administrative fines, or where an insurer fails to comply with an order by FI. While such involvement is intended for "matters of principle or special importance," the IBA does not specify the circumstances. The authorities explained that the government does not get involved as a matter of practice. Nonetheless, the possibility of intervention may compromise FI's independence.

**64. It is important that FI is adequately resourced and empowered in order to effectively discharge its supervisory mandates.** FI's insurance supervisory staffs are competent and qualified. However, due to inadequate resources to supervise a large number of insurers, FI had to make difficult compromises and has been unable to implement appropriate baseline supervision. Going forward, there are also significant resource implications arising from the implementation of Solvency II and supervision of cross-border insurance groups/ conglomerates. The new IBA that provides FI with a broader mandate to

---

<sup>25</sup> Some life policies provide for conditional bonuses that are not guaranteed but would vary according to the investment performance of the underlying assets.



issue secondary regulations is a positive development. The authorities are advised to carefully consider whether the level of legal protection available to the FI and its staff is at the level envisaged by ICP3.

***Conditions for effective insurance supervision (ICP 1)***

65. **A sound and clearly defined financial sector policy framework facilitates insurance supervision in Sweden.** Swedish accounting, auditing and actuarial standards are generally consistent with international standards. There is a high degree of self-regulation by the Swedish insurance industry. A well-developed financial infrastructure and easy access to international markets contribute to the effectiveness of insurers' asset-liability management.

***The supervisory system (ICP 2 to ICP 5)***

66. **FI has a clear mandate to promote a stable and well-functioning financial system with a good level of consumer protection.** It exercises supervision within the state budget framework and MOF's annual appropriation letters and is subject to clear **accountability** mechanisms. While FI's staff members are competent and qualified, more supervisory resources are required to implement a robust risk-based supervision, supported by appropriate baseline supervision. FI had experienced insufficient powers to issue secondary regulations in a few concrete areas, a concern that has been largely addressed by the new IBA. It is unclear whether the legal protection available to FI and its staff is at the level envisaged by ICP 3. The possibility of government involvement in institution-specific issues may compromise FI's independence.

67. **FI adopts a transparent supervisory approach, supported by the Traffic Light model.** It has instituted structured processes for prioritization of supervisory activities and risk assessment to ensure consistency in supervisory measures and decisions. FI has clear accountabilities to the parliament, the industry and the public through various channels.

68. **FI is empowered and regularly exchanges information with other supervisors,** both within and beyond EU, subject to confidentiality safeguards. Sweden is a signatory of the Helsinki protocol, the revised Siena protocol and Budapest protocol.

***The supervised entities (ICP 6 to ICP 10)***

69. **The licensing policy, criteria, and procedures are clear and transparent.** However, the IBA provides for government involvement in the licensing of specific institutions. Senior managers (except Managing Director (MD)) are not subject to fit and proper assessment.

70. **FI conducts due diligence checks on board members, MDs as well as qualifying holders of insurers and may remove such persons if they are no longer fit and proper.** FI has no power to remove auditors or actuaries, nor do they have to be approved. FI is also not empowered to assess senior managers (who are not MD). FI may, however, take action

indirectly by requiring insurers to take corrective action if it finds that auditors, actuaries or senior managers do not meet regulatory requirements.

71. **The regulatory requirements for acquisition and changes in control as well portfolio transfer are clearly set out under the IBA and FIBA.** FI will not approve a portfolio transfer unless it is satisfied that the rights of the policyholders would not be adversely affected.

72. **The corporate governance framework for insurers is broadly in line with ICP 9.** FI examines insurers' corporate governance practices during its on-site inspections and has taken necessary supervisory measures, where appropriate. The authorities are advised to strengthen the corporate governance regime for insurers to reflect international standards and promote the objectivity and effectiveness of the board of directors.

73. **FI supervises and assesses insurers' internal controls in line with the requirements under the IBA and its corporate governance guidelines.** It is empowered and has taken supervisory measures against insurers for deficiencies in internal controls.

#### *Ongoing supervision (ICP 11 to ICP17)*

74. **FI has a systematic and transparent approach to market analysis to identify, assess and mitigate risks to the insurance sector.** The publication of insurance and other market statistics facilitate insurers' understanding of systemic developments that have implications for their operations. Due to limited resources, FI does not analyze developments outside the Swedish market on a regular basis. Nonetheless, it would perform such analysis, when found important, as part of its group supervision.

75. **FI has issued regulations and guidelines setting out the scope, content and frequency of reports by different types of insurers.** It is also empowered to require additional reports necessary for effective supervision or timely intervention. As the regulatory returns are not audited, FI has to reconcile the returns with insurers' audited annual reports. Insurers are not required to report outsourcing arrangements as well as derivatives and off-balance sheet transaction to FI regularly. FI does not have adequate resources to conduct adequate off-site monitoring for all licensed insurers.

76. **FI conducts both full scale and focused inspections.** It has also conducted joint inspections with foreign supervisors. It does not have adequate resources to implement baseline supervision for a large number of supervised insurers and intermediaries, as part of its risk-based supervision. Effective inspection should go beyond a checklist approach in order to better understand insurers' operations and risks.

77. **FI is empowered to take a progressive escalation of preventive measures to address emerging supervisory concerns.** FI takes a proportionate approach in exercising its enforcement and sanction powers. However, FI has no power to: a) order a compulsory transfer of insurance portfolios; b) intervene against a subsidiary of an insurer who is not

under its supervision; and c) take measures to protect the interests of the public and policyholders pending the completion of police investigations.

**78. The IBA and FIBA provides for orderly exits of insurers from the market.**

Policyholders (including ceding insurers) and legitimate beneficiaries have priority rights to the assets covering insurers' technical provisions in the event of insolvency. Regulatory requirements over assets covering technical provisions could be strengthened and clear rules of distribution of assets in the event of insolvency should be established.

**79. Sweden's regulatory frameworks for insurance groups and conglomerates are in line with current EU Directives.**

However, there are no specific provisions regarding: reinsurance, risk concentrations, internal controls and risk management processes applicable to insurance groups. The impending implementation of Solvency II will strengthen supervision of insurance groups, subject to the adequacy of regulatory resources.

***Prudential requirements (ICP 18 to ICP 23)***

**80. FI has issued guidelines on its supervisory expectation of insurers' risk management including their management of underwriting risks and reinsurance risks.**

It reviews insurers' underwriting policies and controls as well as reinsurance arrangements during on-site inspections. Supervisory processes in relation to assessment of insurers' reinsurance arrangements and risk transfer instruments could be enhanced. There is a lack of resources to implement policies and processes to monitor the adequacy of insurers' risk management systems on a regular basis.

**81. FI has established principles and regulatory guidelines on the computation of insurers' technical provisions, which are subject to stress testing under the Traffic Light Model.** FI is empowered to require insurers to remedy any shortfall in their technical provisions, if necessary. However, there is no explicit risk margin and no regulatory policy for computing technical provisions in respect of conditional bonuses.

**82. The IBA and FI regulations set out the requirements for insurers' investments covering technical provisions.** There is scope for updating FI's regulations to reflect international best practice. FI does not have adequate resources to examine insurers' investment operations on a regular basis.

**83. Insurers disclose their derivative activities in accordance with relevant accounting standards, Annual Reports Act (ARA) and Annual Reports for Insurance Undertakings Act (ARIUA).** However, FI has not issued regulations on insurers' derivative activities. It is in the process of drafting the relevant regulations, as it is authorized to do so under the new IBA.

**84. The current solvency regime in Sweden is largely based on EU Solvency I.** As the regime does not take account of all key risks of insurers, FI has introduced the Traffic Light model with prescribed stress testing and reporting requirements as a supervisory tool to better understand insurers' risk profiles and to facilitate early intervention, where appropriate.

### *Markets and consumers (ICP 24 to ICP 27)*

85. **The regime for consumer protection in Sweden is established under various legislations, administered mainly by FI and Swedish Consumer Agency with the support of industry associations.** Other agencies involved include the National Board for Consumer Complaints and the Consumer Ombudsman. Consumer protection should be strengthened by establishing regulatory requirements for conditional bonuses and review of effectiveness of regulatory measures for transfer of policies.

86. **The ARIUA, ARA as well as regulations and guidelines issued by FI governs insurers' public disclosure.** However, the disclosure regime does not fully cover the requirements under the IAIS standards on public disclosure.

87. **FI and industry participants have taken a proactive approach to combating insurance fraud.** There is also close cooperation and information exchange with Swedish Economic Crime Authority and other enforcement agencies and other supervisors, both locally and internationally, to address fraud to preserve the integrity of the insurance sector.

### *AML/CFT (ICP 28)*

88. **Recent FATF follow-up report has noted that Sweden has taken measures to bring 18 out of the 20 recommendations previously rated partially compliant or noncompliant to at least a level equivalent to largely compliant.** More supervisory resources are needed to ensure effective supervision of anti-money laundering/combating the financing of terrorism compliance by insurers' and insurance intermediaries.

**Table 3. Sweden: Recommendations to Improve Observance of ICPs**

ICP	Comments
2. Supervisory objectives	The authorities are advised to consider adopting explicit supervisory objectives for the insurance sector, including FI's role in protecting policyholders.
3. Supervisory authority	The authorities are advised to: <ul style="list-style-type: none"> <li>a) review the adequacy of supervisory resources for effective implementation of a more robust risk-based supervision;</li> <li>b) consider a more principle-based approach in respect of the scope for FI to issue secondary regulations;</li> <li>c) review the role of the government in institutional-specific supervisory issues;</li> <li>d) consider reviewing whether the legal protection available to FI and its staff members are at the level envisaged by ICP3; and</li> <li>e) require publication of the reasons for the removal of board members and the DG of FI.</li> </ul>
4. Supervisory process	The authorities are advised to consider reviewing the impact of judicial review on the ability of FI to make timely interventions to protect policyholders' interests.
5. Supervisory cooperation and information sharing	The authorities are advised to expedite Sweden's accession to the IAIS multilateral MOU.

ICP	Comments
6. Licensing	<p>The authorities are advised to:</p> <ul style="list-style-type: none"> <li>a) review the government's role in the licensing process under the IBA;</li> <li>b) extend the fit and proper assessment to senior management of insurers;</li> <li>c) consider empowering FI to impose licensing conditions; and</li> <li>d) consider having a definition of insurance business in the IBA.</li> </ul>
7. Suitability of persons	<p>The authorities are advised to consider:</p> <ul style="list-style-type: none"> <li>a) explicit provision for FI to assess the fitness and propriety of senior management of insurers as well as their auditors and actuaries; and</li> <li>b) requiring insurers to notify FI of circumstances that may affect the fitness and propriety of its board members, MD, senior managers, auditors and actuaries.</li> </ul>
9. Corporate governance	<p>The authorities are advised to establish clear corporate governance standards for insurers on:</p> <ul style="list-style-type: none"> <li>a) the minimum level of independent directors and criteria for independence;</li> <li>b) establishment of relevant board committees, taking into account the nature, scale and complexity of their operations;</li> <li>c) policies and procedures to assess the effectiveness of their boards;</li> <li>d) the role and accountabilities of senior managers; and</li> <li>a) providing actuaries with direct access to the board and board committee on a timely basis.</li> </ul>
10. Internal controls	<p>To strengthen the checks and balances of insurers' operations, FI is advised to consider adopting explicit provisions to ensure that internal auditors have unfettered access to the board and senior management as well as appropriate status to ensure that senior management acts upon its recommendation.</p>
11. Market analysis	<p>It is important that FI enhance its capacity and resources to analyze the developments outside the Swedish market on a regular basis including Swedish insurers' exposures to foreign risks.</p>
12. Reporting to supervisors	<p>FI is advised to:</p> <ul style="list-style-type: none"> <li>a) formulate a more robust risk-based supervision approach based on both the impact and probability of failure, supported by an appropriate baseline supervision;</li> <li>b) review the adequacy of resources for off-site monitoring;</li> <li>c) establish clear regulatory requirement for insurers to report their reinsurance strategy and program, outsourcing arrangements and off-balance sheet exposures including derivatives transactions; and</li> <li>d) require annual regulatory returns of insurers to be audited.</li> </ul>
13. On-site inspection	<p>FI is advised to improve the robustness of on-site inspection and ensure that the planned baseline onsite supervisory program is supported by adequate supervisory resources.</p>
15. Enforcement or sanction	<p>The authorities are advised to:</p> <ul style="list-style-type: none"> <li>a) empower FI to order a compulsory transfer of insurance portfolios of an insurer in distress;</li> <li>b) strengthen FI's intervention powers against unregulated entities within an insurance group or financial conglomerate;</li> <li>c) consider how best to empower FI in taking necessary measures to protect the interests of the public pending the completion of police investigations; and</li> <li>d) review the government's continued involvement in enforcement and</li> </ul>

ICP	Comments
	sanctions at institution-specific level.
16. Winding-up or exit from the market	<p>The authorities are advised to strengthen protection of policyholders and legitimate beneficiaries by:</p> <ul style="list-style-type: none"> <li>a) ensuring adequate controls over assets covering technical provisions including quarterly submission of the special register of assets; and</li> <li>b) establishing clear rules on how existing assets of an insolvent insurer are to be distributed amongst policyholders.</li> </ul>
17. Group-wide supervision	<p>The authorities are advised to consider:</p> <ul style="list-style-type: none"> <li>a) reviewing the adequacy of supervisory resources, particularly for the effective supervision of cross-border groups/conglomerates;</li> <li>b) harmonizing the supervisory approach for insurance groups and conglomerates, e.g., in the area of risk concentration; and</li> <li>c) formulating appropriate regulatory requirements applicable to nonregulated holding companies.</li> </ul>
18. Risk assessment and management	FI is advised to develop policies and processes to monitor the adequacy of insurers' risk management systems on a regular basis including requiring insurers to report on their risk management system as part of the annual returns.
19. Insurance activity	<p>FI is advised to:</p> <ul style="list-style-type: none"> <li>a) review the adequacy of reinsurance programs as part of its routine off-site surveillance instead of the current limited scope review; and</li> <li>b) establish policies and procedures to check that insurers properly account for all risk transfer instruments.</li> </ul>
20. Liabilities	The implementation of Solvency II will strengthen FI's supervision over insurers' technical provisions.
21. Investments	FI is advised to enhance the robustness of its supervision of insurers' investment operations and update its regulations on investment management by insurers.
22. Derivatives and similar commitments	The authorities are advised to expedite the issuance of regulations governing insurers' derivative activities.
23. Capital adequacy and solvency	The implementation of Solvency II with effect from January 2013 will facilitate FI in implementing a more robust and risk-sensitive solvency regime.
25. Consumer protection	<p>The authorities are advised to:</p> <ul style="list-style-type: none"> <li>a) review the adequacy of the current regulatory requirements for conditional bonuses and transfer of policies; and</li> <li>b) consider articulating more clearly the roles and accountabilities of various agencies involved in consumer protection to improve efficiency and promote better understanding by consumers.</li> </ul>
26. Information, disclosure and transparency towards markets	To facilitate market discipline, FI should formulate plans to implement the IAIS supervisory standards on public disclosures.
28. Anti-money-laundering, combating the financing of terrorism	<p>The authorities are advised to:</p> <ul style="list-style-type: none"> <li>a) review the adequacy of resources for AML-CFT supervision; and</li> <li>b) update the legal requirements where insurers rely on intermediaries to perform customer due diligence (CDD).</li> </ul>

## **Authorities' response to the assessment**

89. **The Swedish authorities welcome the assessment of the regulation and supervision of the insurance sector.** On the whole, we share the views expressed in the assessment as well as the grading of observance of the Insurance Core Principles. The recommendations given will be used to improve the regulation and supervision of the Swedish insurance sector.

90. **Several of the issues raised will be dealt with once the new regulatory framework for the insurance sector, i.e. Solvency II, is implemented.** Sweden is also participating in ongoing work carried out by IAIS on Internationally Active Insurance Groups, which will contribute to further development of the supervisory standard. Additionally, regulation regarding transfer of policies as well as other life insurance related issues is currently under national review.

## C. IOSCO Principles and Objectives of Securities Regulation

### Introduction and methodology

91. **An assessment of the level of implementation of the IOSCO Principles in Sweden's securities market was conducted March 9–21, 2011 as part of the Financial Sector Assessment Program (FSAP).** The assessment was based on the IOSCO Principles and Objectives of Securities Regulation and its Methodology adopted in 2003 and updated in 2008.<sup>26</sup> An initial IOSCO assessment was conducted in 2001. At that time several significant weakness in the scope and effectiveness of securities market regulation were identified. Since then the legislative framework has been expanded, strengthened and set out in greater detail, primarily as a result of Sweden's implementation of a large volume of directives, regulations and recommendations under the EU's financial services action plan intended to make a single European capital market a practical reality. The improved ratings in this assessment reflect those changes.

### Description of the regulatory structure

92. **The structure of financial regulation in Sweden is based on the unitary model in which a single administrative authority, the FI, is responsible for licensing and supervising all entities engaged in the business of providing financial services.** This is established in the Financial Supervisory Authority Instructions Ordinance (2007) and the Instructions Ordinance (2009). The FI is responsible for supervision, regulation and licensing of financial markets and financial firms. It is also charged with coordinating supervision as regards AML-CFT. Section 2 of the Ordinance requires the FI to promote a stable and sound financial system and endeavor to ensure solid consumer protection in the financial system. It has a particular responsibility for monitoring and analyzing developments in the area of its responsibility with a view to detecting risks of instability in the financial sector, which could adversely affect the functioning of the Swedish financial system; in which case, it must notify the government.

93. **Although in the last decade more powers have accrued to the FI, through legislative change, self regulation remains an important part of the regulatory structure in securities markets.** In particular the role of the dominant stock and derivatives exchange, NASDAQ OMX, remains significant, particularly as regards the supervision of listed companies. Another self regulatory body, the Swedish Securities Council (SSC) acts in takeover situations using powers delegated to it by FI.

---

<sup>26</sup> In 2008, IOSCO only updated the footnotes of the Methodology. In June 2010, IOSCO approved a revision to the IOSCO Principles, which mainly resulted in the addition of nine new Principles. However, a revised methodology has not been approved at the time of the assessment. As a result this assessment was conducted based on the then current methodology.



## Market structure

94. **At the end of 2009, 255 companies were listed on NASDAQ OMX Stockholm.** Only those limited companies with at least SKr 500,000 in capital may offer their shares for public trading. Public companies listed on NASDAQ OMX Stockholm may also be quoted on the Nordic list, which quotes public companies listed on the stock exchanges in Helsinki, Copenhagen and Iceland. The Nordic list represents a harmonization of the listing requirements of the four countries.
95. **As of February 2011, there were 89 banks and savings banks and 135 investment firms authorized to carry on securities business.** All were located in Sweden. A majority of the Swedish banks are licensed for securities business, and the four large Swedish banks are a dominant force on the securities market. With only a few exceptions, the "nonbank" securities firms are relatively small and in most cases privately owned.
96. **As of February 2011 there were 921 collective investment schemes (CIS) under management, of which 519 were Undertakings for Collective Investment in Transferable Securities (UCITS) and 400 were special funds.** Total assets under management in these funds were approximately SEK 1.7 trillion. They are managed by 105 authorized firms of which, 82 are fund management companies and 23 are investment firms. There are also 3977 foreign CIS authorized in Sweden under the UCITS based legislation and two specialized funds integrated into the Swedish State Pension System. Most of the major fund management companies have significant operations in Luxemburg where most of their non-Swedish targeted funds are licensed.
97. **NASDAQ OMX Stockholm is the dominant stock and derivatives exchange; NASDAQ OMX Group, Inc. is a United States public company that owns and operates the U.S. NASDAQ stock market, two U.S. exchanges, a Gulf State exchange, and seven European stock and derivatives exchanges in the Nordic and Baltic regions under the OMX brand.** It is currently the sixth largest trading venue in Europe<sup>27</sup>. Data from Thomson Reuters indicates that 42 percent of Swedish equity trading took place outside NASDAQ OMX in February 2011.
98. **In addition to NASDAQ OMX Stockholm, Nordic Growth Market (NGM) and Burgundy have also been licensed by FI to operate as stock and derivatives exchanges in Sweden.** There are also three MTFs. Swedish shares can also be traded on overseas MTFs, such as Chi-X Europe.

## General preconditions for effective securities regulation

99. **There are a number of general preconditions necessary for the effective regulation of securities markets that appear to be in place in Sweden.** There are no significant barriers to entry and exit for market participants. Competition is encouraged and

---

<sup>27</sup> Behind Euronext, Chi-X Europe, LSE, Deutsche Börse, and Borsa Italiana.

foreign participation is welcomed. The legal and accounting system supports the implementation of effective regulation of market participants. The commercial law is up-to-date, and so are corporate governance standards. The legislation regarding insolvency is sophisticated, although there are issues concerning the enforcement of market contracts entered into in the period immediately after insolvency is declared. The regulators have legally enforceable powers of decision and action. The taxation framework is supportive of the operations of the industry in the jurisdiction.

## **Main findings**

**100. Principles for the regulator (Principles 1-5): Although FI is a unitary regulator, FI has to regulate the three major sectors of financial services, banking, securities and insurance under several separate statutes.** While each act may be clear when considered in isolation, there can be problems at the interfaces that can create risks to investors though this is a matter of the effectiveness of enforcement of the law rather than gaps between laws, FI is highly accountable. Restrictions on operational independence arise from the imposition of mandatory special requirements during the course of a financial year and its reliance for 85 percent of its funding on Parliament. Although staff resources have increased in recent years they remain insufficient for current and predictable future work; turnover, particularly of experienced staff, is high. There are rules in place for dealing with the regulator that are intended to ensure procedural fairness, as required by the Principle; the structure of FI is well described and the processes are reasonably transparent. In practice the process of representation prior to the imposition of a major sanction such as license revocation may need enhancement.

**101. Principles for self-regulation (Principles 6-7): Self regulation has a long history in Sweden and still has a far greater role here than in many other European countries.** Although the powers of the FI over exchanges have been strengthened since the 2001 FSAP, there are still limitations in FI's ability to secure changes in certain rules and processes it believes to be necessary short of the threat of the imposition of significant sanctions. Despite being regarded as self regulatory bodies, (in that they are not government authorities but exist in the private sector) the listing rules of securities exchanges and the power to make them are set out in the law. As a result, in this part of their business model the accountability of securities exchanges to FI, the statutory regulator, is unclear.

**102. Principles for enforcement (Principles 8-10): FI has a comprehensive range of inspection, investigation, surveillance and enforcement powers and where it has delegated powers (e.g., to the Swedish Securities Council regarding takeovers) that has been done with the appropriate degree of oversight and review.** Scarce resources limit the capability to carry out effective enforcement and compliance activities thereby limiting the ability of FI to ensure compliance or detect breaches. The interface between supervision and enforcement does not recognize the different skill and mind sets required. The maximum amount licensees and others can be fined is too low and there have been cases where the FI's use of its statutory discretion not too fine a fund manager which has remedied a breach indicates a significant weakness in FI's use of administrative sanctions.

103. **Principles for cooperation (Principles 11-13): FI and other government authorities have fundamental obligation to share information including with foreign regulators.** There are appropriate confidentiality provisions in the law and the gateways through these appear effective. FI can share information with foreign counterparts even if the alleged conduct is not such that it would constitute a breach of Swedish law if conducted within Sweden. FI is a full signatory to the IOSCO MMOU.

104. **Principles for issuers (Principles 14-16): Because the listing rules of NASDAQ OMX and the other securities exchanges derive directly from statute and are not delegated to the exchange by FI appropriately.** There is high level of protection for securities holders in Swedish company law and via implementation of EU directives on takeovers and shareholder rights. Sweden applies the “comply or explain” approach with regard to corporate governance of public companies. The governance code is updated by a private sector body which has self regulatory elements. Although the existence of classes of shares with multiple voting rights renders some major companies largely immune from hostile takeovers bids, these arrangements are transparent to incoming minority shareholders. Although the conduct of takeovers is governed by stock exchange listing rules, another self regulatory body, the Swedish Securities Council, operating under delegated powers from FI (and subject to its oversight), plays a role in enforcing the rules and granting exemptions. Company boards have to represent the interests of all shareholders equally and there are limits to their use of defense mechanisms to thwart a hostile bid. Accounting and auditing standards are high. The supervision of auditors and auditing standards is the responsibility of a government authority, the Supervisory Board of Public Accountants. Sweden has adopted the International Federation of Accountants (IFAC) international standards on auditing ISA. Independence of auditors is required under the Auditors Act. Although standards as regards companies listed on an RM are set by the Swedish Financial Reporting Board, enforcements of elements of the regime are the responsibility of the relevant stock exchange. This looks unsound in a market where for-profit exchanges have begun to compete for listings. The position is currently under review in the MOF.

105. **Principles for collective investment schemes (Principles 17-20): FI has inadequate resources to effectively supervise fund management companies and insurance intermediaries who market collective investment schemes.** The last comprehensive survey (three years ago) discovered a level of noncompliance which suggests many breaches currently go undiscovered unless investors complain. Insurance intermediaries are in practice largely unsupervised for this business. Too much reliance is place on a legal requirement for licensees self-reporting breaches or the external auditor doing so. There is evidence that this system has not been working as was intended and the FI has begun to explore mechanisms by which it might be improved. Sweden has seen the emergence of a category of fund salespersons that has unexpectedly been able to exploit an element of the Swedish interpretation of the UCITS directive whereby Sweden has implemented a set of rules that allows for marketing in the sense of advertising of a CIS with no requirement to obtain a license in advance. Sweden plans shortly to strengthen the wording of the IFA, such that any kind of marketing of a CIS in Sweden will require a notification or license. Due to resource constraints FI is unable to be fully effective in

supervising compliance with its asset segregation rules. Recent cases highlighted breaches extending, in one case, over several years. FI's policy as regards the use of its fining powers does not appear sufficient to act as a deterrent to major fund managers and custodians. Disclosure requirements are as in the UCITS III and appear sufficient. There will be new rules, and additional obligations on the boards of UCITS management companies with the implementation of UCITS IV in July 2011. On unlisted securities FI has issued guidance imposing a special duty of care on fund managers as regards valuations.

**106. Principles for intermediaries (Principles 21-24): The number of staff carrying on prudential and in particular conduct of business supervision is insufficient.** Applicants for a license are only subject to an on-site inspection if their business is sufficiently large and complex that physical Chinese walls are an issue. The six major firms are seen by the prudential supervisors at least annually and often quarterly; the remainder is seen once in 2.5 years. Conduct of business supervisors do no on-site inspections except for cause or as part of “themed” projects. Within the limits set by the number of staff, inspections and examinations appear thorough. Pre-visit planning is detailed and objective based. Feedback to firms itemizes problem areas comprehensively and action is required and followed up. The department has introduced a risk based supervision approach to make the best use of limited resources. There is a problem in the interface between the SMA and the Insurance Intermediation Act which create risk to retail investors. Unless licensed under the more rigorous requirements of the SMA an insurance intermediary is not permitted to give investment advice on shares, bonds structured products or other complex financial instruments but some are doing so. FI has recently initiated a full review of its relevant regulations.

**107. There are initial and ongoing minimum capital requirements with which market intermediaries must comply.** These requirements are harmonized at the EU level under the CRD. These have been transposed into Swedish law via the Capital Adequacy and Large Exposures Act (2006). The requirements set out in the IOSCO Principle appear to be present. An intermediary is required to self-report problems to FI and the external auditor has an obligation to report any problems discovered on the audit of the intermediary. The effectiveness of this last requirement is in doubt, which, as a result of one large case, has stretched the supervision resources even farther than normal. The appropriate agreements are in place to deal with the failure of an intermediary. FI, RB and the MOF have signed an MOU regarding crisis management. FI is a signatory to the MOU on cooperation between the financial supervisory authorities, central banks, and finance ministries of the EU on cross-border financial stability. With regards to Swedish financial institutions with significant activities in other countries there are MOUs on supervision with other relevant jurisdictions within Sweden and in the Nordic area. Regular scenario/stress test situations are carried out together with RB. Such work has also been carried out at the Nordic level.

**108. Principles for secondary markets (Principles 25-30): In comparison with securities exchanges globally, securities exchanges in Sweden have a wide self regulatory remit.** In recent years, FI's powers over exchanges have been significantly strengthened. The authorization provisions currently applied to trading systems operated by

some of the large banks do not fully meet the IOSCO Principle regarding transparency. There are challenges across Europe as markets fragment and a variety of trading platforms are developed. Sweden does not appear to derogate from the current Markets in Financial Instruments Directive (MiFID) pre and post trade transparency regime. The assessment recognizes the concerns identified in Sweden and elsewhere as part of the current MiFID review on specific elements in the current regime.

109. **Enforcement of prohibitions on insider dealing and market manipulation are inadequate.** Overall it appears that although the prosecution authority (NECB) has a good record in successfully prosecuting those cases it brings to court, the current regime has only limited deterrent effect in applying dissuasive sanctions despite Sweden having implemented the Market Abuse Directive. Elsewhere, in securing market integrity and minimizing systemic risk Sweden has implemented the relevant EU directives such as the Settlement Finality Directive. Large Exposures are dealt with in the Capital Adequacy and Large Exposures Act to which all banks and market intermediaries are subject. The market authorities have powers to take action under their rules and regulations if necessary.

**Table 4. Sweden: Summary Implementation of the IOSCO Objectives and Principles—Detailed Assessment**

Principle	Findings
Principle 1. The responsibilities of the regulator should be clearly and objectively stated.	Although FI is a unitary regulator FI has to regulate the three major sectors of financial services, banking, securities and insurance under several separate statutes. While each Act may be clear when considered in isolation, there can be problems at the interfaces which can create risks to retail investors though this is a matter of the effectiveness of enforcement of the law rather than gaps between laws.
Principle 2. The regulator should be operationally independent and accountable in the exercise of its functions and powers.	FI is highly accountable. Restrictions on operational independence arise from the imposition of mandatory special requirements during the course of a financial year and its reliance for 85 percent of its funding on Parliament.
Principle 3. The regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers.	Although staff resources have increased in recent years they remain insufficient for current and predictable future work; turnover, particularly of experienced staff, is high.
Principle 4. The regulator should adopt clear and consistent regulatory processes.	There are rules in place for dealing with the regulator that are intended to ensure procedural fairness. In practice, the process of permitting a party to be heard prior to the imposition of a major sanction such as license revocation may need enhancement.
Principle 5. The staff of the regulator should observe the highest professional standards.	The Board and staff of FI are subject to the highest professional standards and these are appropriately monitored.
Principle 6 The regulatory regime should make appropriate use of self-regulatory organizations (SROs).	Self regulation has a long history in Sweden and still has a far greater role here than in many other European countries.

Principle	Findings
Principle 7. SROs should be subject to the oversight of the regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.	Although the powers of the FI over exchanges have been strengthened since the 2001 FSAP there are still limitations.
Principle 8. The regulator should have comprehensive inspection, investigation and surveillance powers.	FI has a comprehensive range of powers and where it has delegated these power, e.g., to the Swedish Securities Council as regards takeovers, that has been done with the appropriate degree of oversight and review.
Principle 9. The regulator should have comprehensive enforcement powers.	FI has comprehensive enforcement powers.
Principle 10. The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and implementation of an effective compliance program.	<p>Scarce resources limit the possibilities to detect breaches.</p> <p>The interface between supervision and enforcement does not recognize the different skill and mind sets required.</p> <p>The maximum amount licensees and others can be fined is too low and there have been cases where the FI's use of its statutory discretion not too fine a fund manager, which has remedied a breach indicates a significant weakness in FI's use of administrative sanctions.</p>
Principle 11. The regulator should have the authority to share both public and nonpublic information with domestic and foreign counterparts.	FI and other government authorities have fundamental obligation to share information including with foreign regulators. There are appropriate confidentiality provisions in the law and the gateways through these appear effective.
Principle 12. Regulators should establish information sharing mechanisms that set out when and how they will share both public and nonpublic information with their domestic and foreign counterparts.	FI has more than 40 active MOUs and Letters of Intent with foreign authorities. FI is a full signatory to the IOSCO MMOU.
Principle 13. The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers.	FI has extensive powers to assist foreign regulators with information held by FI. It also has extensive powers to access information held by other entities.
Principle 14. There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions.	<p>Because the listing rules of NASDAQ OMX and the other securities exchanges derive directly from statute and are not delegated to the exchange by FI appropriately.</p> <p>The provisions whereby a company can keep confidential information it would otherwise be required to make public lack specificity.</p> <p>The maximum of 120 days for filing annual reports, while it may the European standard is slow by comparison with some other advanced markets where 90 or 75 days is the norm.</p>

Principle	Findings
<p>Principle 15. Holders of securities in a company should be treated in a fair and equitable manner.</p>	<p>There is a high level of protection for securities holders in Swedish company law and via implementation of EU directives on takeovers and shareholder rights.</p> <p>Sweden applies the “comply or explain” approach with regard to corporate governance of public companies.</p> <p>Although the existence of classes of shares with multiple voting rights renders some major companies largely immune from hostile takeovers bids, these arrangements are transparent to incoming minority shareholders.</p> <p>The conduct of takeovers is governed by stock exchange listing rules. Another self regulatory body, the Swedish Securities Council, operating under delegated powers from FI (and subject to its oversight), also plays a role.</p> <p>Company boards have to represent the interests of all shareholders equally and there are limits to their use of defense mechanisms to thwart a hostile bid.</p>
<p>Principle 16. Accounting and auditing standards should be of a high and internationally acceptable quality.</p>	<p>Accounting and auditing standards are high. The supervision of auditors and auditing standards is the responsibility of a government authority, the Supervisory Board of Public Accountants. Sweden has adopted the IFAC international auditing standards—ISA. Independence of auditors is required under the Auditors Act.</p> <p>Group accounts (and those of listed companies) must be prepared according to IFRS as adopted by the EU. Other companies may use a mix of IFRS and Swedish Generally Accepted Accounting Principles.</p> <p>Enforcements of elements of the accounting regime for listed companies are the responsibility of the relevant stock exchange. This looks unsound in a market where competing for profit exchanges have begun to compete for listings The position is currently under review in the MOF.</p>

Principle	Findings
<p>Principle 17. The regulatory system should set standards for the eligibility and the regulation of those who wish to market or operate a collective investment scheme.</p>	<p>FI has inadequate resources to effectively supervise fund management companies and insurance intermediaries who market CIS.</p> <p>Insurance intermediaries are in practice largely unsupervised for the sale of CIS. They are not required to provide quarterly reports, require no capital but carry PII; FI relies on customer complaints to indicate problems.</p> <p>Too much reliance is place on licensees self-reporting breaches or the external auditor doing so as required under the law.</p> <p>Sweden has seen the emergence of a category of fund salespersons that has unexpectedly been able to exploit an element of the Swedish interpretation of the UCITS directive whereby Sweden has implemented a set of rules that allows for marketing in the sense of advertising of a CIS with no requirement to obtain a license in advance.</p>
<p>Principle 18. The regulatory system should provide for rules governing the legal form and structure of collective investment schemes and the segregation and protection of client assets.</p>	<p>Due to resource constraints FI is unable to be fully effective in supervising compliance with its asset segregation rules. Recent cases highlighted breaches extending, in one case, over several years.</p> <p>FI's fining policy in this area does not appear sufficiently tough to act as a deterrent to major fund managers and custodians.</p>
<p>Principle 19. Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme.</p>	<p>Disclosure requirements appear sufficient. There will be new rules, and additional obligations on the boards of UCITS management companies with the implementation of the UCITS IV directive in July 2011.</p>
<p>Principle 20. Regulation should ensure that there is a proper and disclosed basis for assets valuation and the pricing and the redemption of units in a collective investment scheme.</p>	<p>Current requirements appear satisfactory. There will be new rules on principles for valuation of the fund with the implementation of UCITS IV.</p> <p>On unlisted securities FI has issued guidance imposing a special duty of care on fund managers. Under this guidance it would not be appropriate for the valuation to be performed by the person or persons responsible for the management of the fund.</p> <p>There are appropriate regulations governing the treatment of pricing errors and suspension of redemptions.</p>



Principle	Findings
<p>Principle 21. Regulation should provide for minimum entry standards for market intermediaries.</p>	<p>The number of staff carrying on prudential and in particular conduct of business supervision is insufficient. The latter do no on-site inspections except for cause or as part of “themed” projects.</p> <p>Within the limits set by the number of staff, inspections and examinations appear thorough. Pre-visit planning is detailed and objective based.</p> <p>The department has introduced a risk based supervision approach to make the best use of limited resources.</p> <p>Unless licensed under the more rigorous requirements of the SMA an insurance intermediary is not permitted to give investment advice on shares, bonds structured products or other complex financial instruments but some are doing so.</p>
<p>Principle 22. There should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks that the intermediaries undertake.</p>	<p>There are initial and ongoing minimum capital requirements with which market intermediaries must comply. These requirements are harmonized on EU level under MIFID and the Capital Requirement Directive, (CRD).</p>
<p>Principle 23. Market intermediaries should be required to comply with standards for internal organization and operational conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters.</p>	<p>The requirements set out in the IOSCO Principle appear to be present.</p> <p>An intermediary is required to have an adequate management and organizational structure and adequate internal controls. An intermediary is required to have senior management that is of sufficiently good repute and sufficiently experienced. The senior management is primary responsible for ensuring that an intermediary complies with its legal obligations.</p> <p>An intermediary is required to maintain, monitor and regularly evaluate its procedures and systems; to have an internal audit function and to appoint an independent external auditor. An intermediary should self-report problems to FI and the external auditor has the same obligation.</p> <p>The effectiveness of this last requirement is in doubt, which, as a result of one large case, has stretched the supervision resources even farther than normal.</p>

Principle	Findings
Principle 24. There should be a procedure for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.	<p>The appropriate agreements are in place. FI, RB and the MOF have signed an MOU regarding crisis management. FI is a signatory to the MOU on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross-border financial stability.</p> <p>There is an Investors Compensation Schema as required under EU law.</p> <p>During the last three years, FI has successfully handled several major instances of failure of an intermediary in cooperation with other authorities in Sweden and overseas.</p>
Principle 25. The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight.	The authorization provisions currently applied to trading systems operated by some of the large banks do not fully meet the requirements of Principle 25 concerning adequate transparency.
Principle 26. There should be ongoing regulatory supervision of exchanges and trading systems, which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants	FI's powers over stock exchanges as trading systems have been strengthened in recent years although weakness exist in one aspect of their business model - listings. See Principle 7.
Principle 27. Regulation should promote transparency of trading.	There are challenges across Europe in achieving appropriate levels of market transparency. Sweden does not appear to derogate from the current MiFID pre and post trade transparency regime.
Principle 28. Regulation should be designed to detect and deter manipulation and other unfair trading practices	Sanctions for violation of the criminal law are not sufficient to be fully effective, proportionate and dissuasive as required by the Principle.
Principle 29. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.	Sweden has implemented the relevant EU Directives such as the Settlement Finality Directive. Large Exposures are dealt with in the Capital Adequacy and large Exposures Act to which all banks and market intermediaries are subject. The market authorities have powers to take action under their rules and regulations if necessary.
Principle 30. Systems for clearing and settlement of securities transactions should be subject to regulatory oversight, and designed to ensure that they are fair, effective and efficient and that they reduce systemic risk	Not assessed.

**Table 5. Sweden: Recommended Action Plan to Improve Implementation of the IOSCO Objectives and Principles**

Principle	Recommended Action
Principle 1	Steps should be taken to clarify that insurance intermediaries wishing to sell shares, bonds, structured products and other complex products must be licensed under the SMA and mechanisms developed to get this message across to current and potential licensees.
Principle 2	<p>The government should reconsider its policy of attaching specific short term project requirements to Parliament's annual budget allocation for FI initially and during the course of the financial year.</p> <p>The government should examine the benefits of changing the basis of FI's funding to a structure where the mix as between Parliamentary allocation and fees levied by FI is more reliant on the latter and where, subject to consultation, FI can set the fees at the level it believes is necessary to fulfill its mandates.</p>
Principle 3	<p>The government and FI should consult on measures to seek to ensure that FI has sufficient, and sufficiently experienced and qualified staff to meet current and predicated workloads.</p> <p>Given that FI will never be able to compete solely on salary levels it should consider how best to create career paths and a work environment which encourage staff to remain in public service beyond the time when industry finds their acquired skills and knowledge particularly desirable.</p>
Principle 4	FI should review its internal processes by which licensees can make representations prior to the imposition of major sanctions such as license revocation.
Principle 7	The government might wish to consider whether the time may be approaching when the need to ensure consistently applied, effective and efficient issuer regulation will require regulation of issuers on a statutory basis by a single statutory body such as FI.
Principle 10	<p>FI should consider whether it has got the balance right between supervision and enforcement in its current structure.</p> <p>FI should consider increasing fines to dissuasive levels and review the use of its statutory discretion not to fine fund management companies because they rectify breaches.</p>
Principle 14	<p>See recommendation under Principle 7.</p> <p>FI and NASDAQ OMX should consider jointly whether the criteria under which a listed company can legitimately delay publishing price sensitive information should be given greater specificity and transparency.</p> <p>The government might wish to consider whether the EU standard of a maximum of 120 days for filing annual reports is adequate as a means of providing investors with useful information on the performance of a public company.</p>
Principle 15	FI might wish to consider whether the requirement for insiders to report their transactions in 5 days is too long given current technology.
Principle 16	The MOF should pursue to a definitive conclusion its review of whether for-profit securities exchanges should continue to be responsible for enforcing accounting standards on listed companies

Principle	Recommended Action
Principle 17	<p>The regulation of insurance intermediaries who sell collective investment schemes should be strengthened.</p> <p>The FI should implement its current plans to end the provision which permits unlicensed persons to sell unapproved foreign collective investment schemes to retail investor as long as no money changes hands directly should be closed.</p> <p>FI, in consultation with the government, should take steps to increase the resources in the investment funds supervision department to a level which enables it to fully meet its mandate.</p> <p>Government should review the maximum level of fines and FI should review its apparent policy of forbearance in the use of fines at the top end of the range.</p>
Principle 18	Consider the need for additional segregation requirements and detailed confirmation of assets by the independent auditor where the AMC and custodian are not at arm's length.
Principle 21	FI, in consultation with the government should take steps to increase the resources in the securities firms supervision department to a level which enables it to fully meet its mandate.
Principle 22	Consider more timely/frequent reporting by securities firms
Principle 25	In addition to reviewing the trading rules of a securities exchange for compliance with the SMA and its Regulations, the FI should also review and analyse the performance of the trade matching or execution algorithm of automated trading systems.
Principle 28	The Government should carry out a comprehensive review of the legal and judicial framework around the prosecution of securities market crimes to see whether steps could be taken to make the process more effective, proportionate and dissuasive.

### Authorities' response to the assessment

110. **The Swedish authorities appreciate the work carried out by the IMF in assessing Sweden against the IOSCO principles.** Overall, the authorities agree with the mission's assessment, and consider many of the recommendations valuable to improve the regulation and supervision of the securities markets.

## **D. Assessments of Observance of CPSS Core Principles for Systemically Important Payment Systems**

### **Information and methodology used for assessment**

111. **This assessment was undertaken in March 2011 in the context of an IMF Financial Sector Assessment Program (FSAP) mission covering, inter alia, the Core Principles for Systemically Important Payment Systems (CPSIPS).** This assessment covers the Riksbank's Funds Transfer System (RIX), providing facilities for real-time gross settlement (RTGS) in central bank money of Swedish kronor (SEK) payment transactions.

112. **Sveriges Riksbank (RB) has conducted a detailed self-assessment of the RIX system's observance of the Core Principles (CP).** This assessment was made available to the mission. The RB also provided a large number of documents relevant for the assessment. Extensive meetings were held with officials from the RB, supplemented by discussions with officials from the Ministry of Finance (MOF), the Swedish Banker's Association (SBA) and four RIX participants (two banks and two institutions providing clearing or settlement services).

113. **The Committee on Payment and Settlement Systems' (CPSS) Report on CPSIPS Part I and II and an IMF and World Bank guidance note were used when assessing the RIX system.** The logistical support and warm hospitality of the officials of RB as well as the constructive and informative discussions with all other parties are greatly appreciated.

### **Institutional arrangements**

114. **The RB's responsibilities in respect to the payments system and its various components are formulated in very general terms in the Sveriges Riksbank Act.** According to the act, the RB has a task to promote a safe and efficient payment system, which has been interpreted as a task to look after the stability of the Swedish financial system. To this end, safe and efficient financial market infrastructures play a critical role **and** the RB's role as an overseer of the payments system therefore derives from this task. The Riksbank Act also states that the RB may make available systems for settlement of payments and in other ways participate in the settlement of payments. The RB runs the funds transfer system called RIX.

115. **FI is the Swedish financial supervisory authority.** FI is responsible for the supervision of companies operating in the credit, insurance and securities markets. This includes the supervision of all clearing organizations and payment systems, except for RIX, which is operated and overseen by the RB. Contribution to the stability and efficiency of the Swedish financial sector is part of FI's overall objective. FI reports to the MOF.

116. **The MOF has responsibility in relation to legislation that makes the financial system efficient and stable.** The MOF also follows developments in the financial markets

and business sector so as to be able to assess the need for new legislation or amendments to existing laws. Much of the legislation in the financial markets area is the European Union (EU) legislation. The EU goal is to establish a single market for financial services.

**117. The Swedish National Debt Office (SNDO), Riksgälden, is an agency reporting to the MOF and its responsibilities include central government cash management, managing central government debt and providing state guarantees and loans.**

Additionally, the SNDO is responsible for the deposit insurance and investment schemes and government support to banks. The SNDO participates in the RIX system as the government agency responsible for the processing and management of government payments.

**118. In the private sector, the SBA, Svenska Bankföreningen, has standing committees which discuss and coordinate issues concerning the processing of payments and regulatory and technical aspects of payment systems.** One example is that within the framework of this association, the participants in RIX (excluding the public entities) enter into agreements with one another about cut-off times and the processing of payments. The Association is also owner of a retail payment system (credit transfer) in Sweden, the Data Clearing System, which is operated by Bankgirocentralen BGC AB (BGC).

### **The payment infrastructure in sweden**

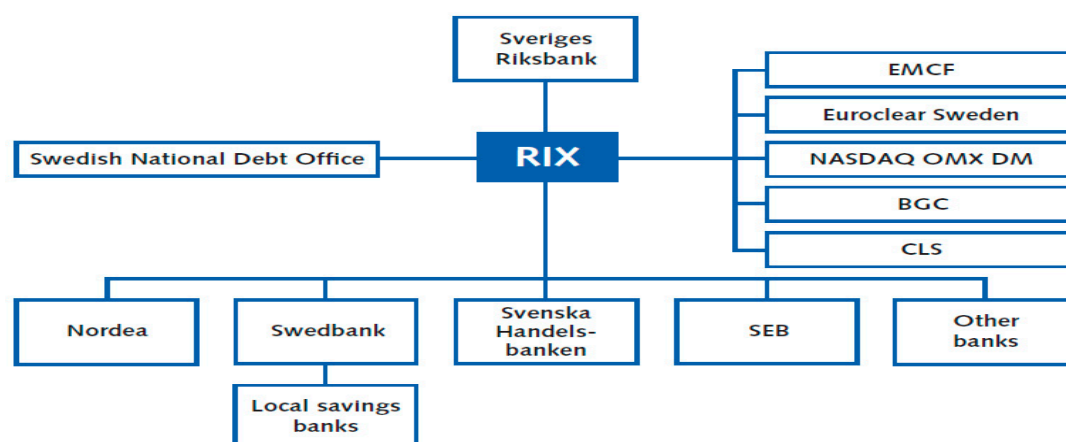
**119. The RB owns and runs the funds transfer system named RIX.** RIX started operating in 1990. In February 2009, the technical system and the technical platform were replaced with a new system delivered by the Italian firm Società Interbancaria per l'Automazione - Società per i Servizi Bancari (SIA-SSB). RIX has 24 participants,

**120. The Swedish Central Securities Depository (CSD), Euroclear Sweden, operates the Securities Settlement System (SSS).** Equities, bonds and money market instruments are all dematerialized and handled in book-entry form in an in-house developed system.

**121. NASDAQ OMX runs the Swedish stock exchange, the derivatives exchange and the electronic inter-dealer exchange for certain government bonds.** This same entity acts as the central counterparty (CCP) for derivatives and repo transactions.

**122. A second CCP, the European Multilateral Clearing Facility (EMCF), was introduced in the Swedish equity market in 2009.** EMCF (licensed in the Netherlands) acts as a CCP in the clearing of cash equity transactions on the NASDAQ OMX exchanges in Stockholm, Copenhagen and Helsinki and on some other multilateral trading platforms operating in the Nordic countries.

**123. There is one major retail payment system in Sweden. BGC offers Automated Clearing House (ACH) services with settlements occurring at participants accounts in RIX.**

**Figure 1. Sweden: The Main Market Infrastructure Components**

Source: RB.

**Table 6. Sweden: RIX Payments Statistics 2005–2010**

	2005	2006	2007	2008	2009	2010
Number of participants	21	20	21	21	23	24
Volume, million transactions	1,50	1,70	1,95	2,01	2,58	2,96
Value, Billion SEK	111,174	124,750	122,873	136,600	174,562	137,370

Source: RB.

### **Main findings—summary**

124. **The mission conducted an assessment of the RIX system relative to the CPSIPS and confirmed a high degree of observance of these principles.** The mission's assessment points to opportunities for further improvements in the legal basis and in clearly defining and publicly disclosing its major policies with respect to systemically important payment systems to ensure full adherence to the CP.

125. **Legal foundation (CP I).** There is a generally sound legal basis, including laws, regulations and contractual arrangements, and clear documentation for the system, with contractual force. Nevertheless, there are some very problematic uncertainties regarding finality and collateral security in Swedish legislation. The Settlement Finality and the Financial Collateral Directives have been transposed into Swedish legislation in a way deviating from what is foreseen in the directives. As a result, there is now certainty as regards netting, finality and collateral for transactions completed *before* the opening of bankruptcy or reorganization procedures of a participating entity. However, there are uncertainties regarding the treatment of funds transfers and collateral transactions completed *after, but within the same business day* of such a court decision.

126. **Understanding and management of risks (CPs II-III).** As RIX is a RTGS system with central bank money as settlement asset, credit risk does not arise for participants in the system. RB is subject to credit risk to the extent it provides credit to participants, however this risk is mitigated by it requiring collateral (subject to daily valuation and the application of haircuts) for any credit provided. As a result, the main financial risk to which participants are exposed is liquidity risk. To manage liquidity during the day, participants can obtain intraday credit from RB and they have a number of tools available in the system to control their payment flows.

127. **Settlement (CPs IV-VI).** Individual payments are settled on real-time gross basis in the RIX RTM module, or in liquidity saving mode (but still gross) in one of the five LOMs. Settlement of payments takes place on a first-in first-out (FIFO) basis, but in a queue situation, settlement is in accordance with "FIFO- next first fit bypass." Payments are settled with immediate finality.

128. **Security and operational reliability and contingency arrangements (CP VII).** RIX is a stable and reliable system with a good track record as regards availability. RIX operational and technical procedures are extensively documented. There are two operational centers for RIX, although within limited geographical distance and with no guarantee that there will in all circumstances be staff available to operate the secondary site. Data is replicated in real-time and there is network redundancy between the two sites. RB regularly organizes contingency testing exercises. Crisis management procedures are set out in a manual defining decisions, responsibilities and roles played by different actors. In view of increased national and international interdependencies, the RB may wish to reduce the business recovery requirement to two hours, as used in some major.

129. **Efficiency and practicality of the system (CP VIII).** RIX being a state-of-the-art system, following experience from two years of live operation, its technical operation and business and liquidity management features have been welcomed with satisfaction by its users. There is a good flow of payments throughout the day. RB has adopted a full cost recovery principle, which is in line with best practice. Participants' overall cost (bank internal cost + fixed fees + transaction fee) for making a payment in RIX is relatively high.

130. **Criteria for participation (CP IX).** Access rules to payment and SSS represent an important element in the overall safety and efficiency management of such systems. They provide potential participants advance information, besides on technical matters, on type and regulatory arrangements for the institutions they would face as a participant in the system. The rules for participation in RIX are clear, objective, documented and publicly available.

131. **Governance of the payment system (CP X).** The RB owns and operates the RIX system. Internal governance arrangements are clearly defined and documented. Documentation providing relevant information on the system and its operations is readily available both internally and to users, it is complete and is being kept up-to-date. The operational and oversight functions of RB are clearly separated. Two external structures ensure users are appropriately involved in issues related to the system and its further



development: the RIX Council and the RIX User Group. Many regular monitoring reports are shared with the users—including those on availability and cost recovery. RB also regularly conducts a customer satisfaction survey.

132. **Central Bank responsibilities in applying the CPSIPS.** As regards the RB oversight function, information published in 2001 gave an insight into the rationale for oversight, some information on the oversight work and the oversight standard applied. At the time, this was in line with good practice. However, since then the financial system has gone through a fundamental evolution and become more complex. To provide for transparency and clarity, it will be beneficial to lay out and publish up-to-date and comprehensive information on the RB's oversight objectives and policies, scope of oversight, standards applied and methodologies used, as well as on the distribution of responsibilities and work between the RB and FI.

133. **For a number of years, all systemically important systems have been subject to annual oversight assessments, which have been published in full on RB's website.** Moreover, new systems, products or functions are also subject to an oversight review, but informally, before their going live. Making the pro-active reviews more formal should be considered. So to should informing the public of their existence, including high-level information on the outcome. Formalizing change assessments could also allow for a move to somewhat lower frequency for the conduct of work-intensive full-scale assessments.

134. **RB lacks formal legal powers in relation to payment, clearing and settlement activities that are not operated by itself, therefore, as regards arrangements operated by other parties it can only use moral suasion in its endeavors to achieve its policy objectives.** It would be desirable to provide in the statute the right to issue regulations (applicable to any relevant parties or activities) in conjunction with the RB's critical payment, clearing and settlement system responsibility, arising from its central banking functions which inherently underpin monetary policy and financial system stability.

135. **As the Mission's assessment points to opportunities for improved observance on several aspects of the relevant recommendations by the CCP,** the RB and FI are encouraged to take more straightforward positions when they identify areas of concern in their assessments of market infrastructures, or in the event identified shortcomings would not be addressed within an appropriate period of time.

136. **Moreover, oversight assessments of the RIX system are conducted by the RB alone, while those of other key infrastructures are conducted jointly with FI.** The cooperation is guided by a high-level Memorandum of Understanding (MOU) between the two, which however could be further specified so as to clarify the division of responsibilities in view of avoiding overlaps or gaps in the assessment work.

**Table 7. Summary Observance of the CPSIPS and Central Bank Responsibilities in Applying the CPs**

Core Principle/Responsibility	Comments
<b>Legal foundation</b>	
CP I – The system should have a well-founded legal basis under all relevant jurisdictions.	Important uncertainties remain regarding the treatment of funds transfers and collateral transactions completed <i>after, but within the same business day</i> of a court decision on the opening of bankruptcy or reorganization procedures of a participating entity.
<b>Understand and management of risks</b>	
CP II – The system’s rules and procedures should enable participants to have a clear understanding of the system’s impact on each of the financial risks they incur through participation in it.	System rules and procedures are comprehensive, fully documented and clear.
CP III – The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.	There is no credit risk on payments received in RIX. Access to intraday credit and a number of system tools allow participants to manage their liquidity throughout the day.
<b>Settlement</b>	
CP IV – The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.	The system provides for RTGS with immediate finality.
CP V – A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.	Not applicable.
CP VI – Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.	Transactions are settled in central bank money.
<b>Operational reliability and efficiency</b>	
CP VII – The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.	RIX is a stable and reliable system with a good track record as regards availability. The secondary site arrangement could be considered as well as moving to a more stringent business recovery requirement (such as two hours).
CP VIII – The system should provide a means of making payments, which is both practical for its users and efficient for the economy.	The new RIX system has been welcomed with satisfaction by its users. However, participants overall cost for making a payment in RIX is relatively high.
<b>Access and governance</b>	

Core Principle/Responsibility	Comments
CP IX – The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.	RIX participation rules are clear, objective and publicly available.
CP X – The system’s governance arrangements should be effective, accountable and transparent.	Internal and external governance is clearly defined, documented and well appreciated by participants.
<b>Central bank responsibilities</b>	
Responsibility A – The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.	It will be beneficial to lay out and publish up-to-date and comprehensive information on the RB’s oversight objectives and policies.  Pro-active oversight reviews of new system features etc. could be made more formal—this could also allow for a move to somewhat lower frequency for the conduct of work-intensive full-scale assessments.
Responsibility B – The central bank should ensure that the systems it operates comply with the core principles.	Annual assessments of RIX against the CPSIPS are published in full on RB’s website.
Responsibility C – The central bank should oversee observance with the core principles by systems it does not operate and it should have the ability to carry out this oversight.	It would be desirable to provide in the RB’s statute the right to issue regulations (applicable to any relevant parties or activities) in conjunction with its critical payments system responsibility.
Responsibility D – The central bank, in promoting payment system safety and efficiency through the core principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.	In view of avoiding overlaps or gaps in the joint assessment work by RB and FI, further specify the division of responsibilities between the two.

**Table 8. Key Recommendations**

<i>Reference principle</i>	<i>Recommended action</i>
<b>Legal foundation</b>	CP I: Due to the way in which the Settlement Finality and the Financial Collateral Directives have been transposed into Swedish legislation, there are some very problematic uncertainties regarding the treatment of funds transfer and collateral transactions completed <i>after, but within the same business day</i> of such a court decision. Authorities should address problems in legislation related to finality and collateral security.
<b>Understanding and management of risks</b>	
<b>Security and operational reliability, and contingency arrangements</b>	CP VII: Whereas the RB currently has a business recovery requirement of four hours, in view of increased national and international interdependencies, compliance with best practice would suggest moving to a more stringent requirement. Consider implementing a business recovery requirement of two hours for RIX.

<i>Reference principle</i>	<i>Recommended action</i>
<b>Responsibility A</b>	<p>To provide for transparency and clarity on its oversight function, it will be beneficial to lay out and publish up-to-date and comprehensive information on the RB's oversight objectives and policies, scope of oversight, standards applied and methodologies used, as well as on the distribution of responsibilities and work between the RB and FI.</p> <p>In view of proactive oversight, new systems, products or functions are being reviewed, but informally, before their going live and no reference to them is made in public documents. It is recommended to formalize change assessments, and consider moving to somewhat lower frequency for the conduct of work-intensive full-scale assessments.</p>
<b>Responsibility C</b>	<p>It will be beneficial to provide in the RB's statute the right to issue regulations in conjunction with its critical payments system responsibility.</p> <p>Further specify the MOU between RB and FI in view of avoiding overlaps or gaps in the assessment of key market infrastructures.</p> <p>In assessing market infrastructures against oversight standards, RB (and FI) should take more straightforward positions when areas of concern are identified, or in the event identified shortcomings would not be addressed within an appropriate period of time.</p>

### **Authorities' response to the assessment**

137. **The** Swedish authorities welcome the detailed assessment of the RIX system conducted by the IMF. We highly appreciate the insights and suggestions for improvements and overall we share the views expressed. The Swedish authorities would like to extend the following comments to some of the views highlighted in the assessment.

#### ***Core Principle 1—Legal foundation***

138. As mentioned in the assessment, several authorities have highlighted perceived shortcomings in current law, and the Ministry of Finance is looking for a way to address these issues at first opportunity.

#### ***Core Principle VII—Operational risk***

139. The Swedish authorities agree that the demands on security, operational reliability and contingency must be extremely high due to the RIX system's importance for the Swedish financial market. However, the demands must be feasible and in accordance with the central bank's size and resources. But in line with the recommendation from the IMF, improvements may be made and the Swedish authorities will request the operator of the RIX system to

include the recommendations from the IMF in their current analysis on how the contingency arrangements for RIX can be strengthened.

***Central Banks responsibility A in applying the Core Principles***

140. The Swedish authorities agree with the recommendations and work has been initiated that aims to make the oversight of the financial infrastructure more efficient and clear. The aim of such work is to publish a paper with comprehensive information regarding the Riksbank's oversight role and to describe the roles of the Riksbank and Finansinspektionen.

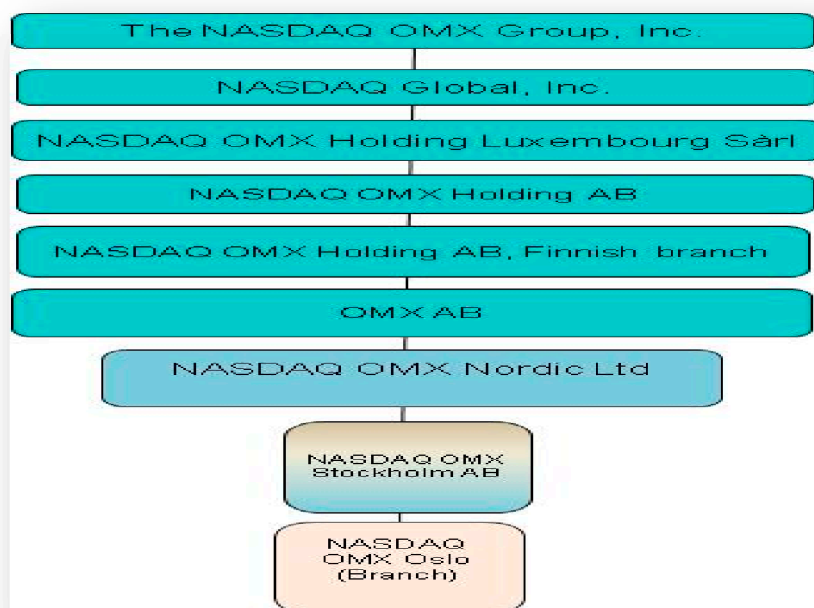
## E. Assessment of Observance of CPSS-IOSCO Recommendations for Securities Settlement Systems and Central Counterparties

### Information and methodology used for assessment

141. The assessment of NOMX DM against the CPSS/IOSCO Recommendations for Central Counterparties (RCCPs) was undertaken in the context of the IMF's Financial Sector Assessment Program (FSAP) Update for Sweden, March 9–22, 2011. Prior to the mission, NOMX DM conducted a comprehensive and clear self-assessment following the methodology of the RCCPs published in 2004. The assessor also benefited from discussions with FI, RB, as well as NOMX DM senior management and staff, and some participants in the system. The Swedish authorities were fully cooperative and all relevant documentation to fulfill the assessment was made readily available. Relevant authorities and the operator of the system have been very cooperative in providing supplemental information and organizing additional meetings, when required.

### Institutional and market structure—overview

142. NOMX DM provides CCP services for equity and fixed income derivatives, as well as repos transactions since 2010. It clears products issued in SEK, DKK, NOK, EUR, but the bulk of the products are in SEK. Products cleared are either exchange traded or OTC traded but highly standardized.



143. NOMX DM is not incorporated as a separate legal entity, but is included within NOMX STO which operates the Swedish stock exchange. NOMX STO is a subsidiary of NOMX Nordic Limited which belongs to the NOMX Group, an international group that offers services for trading securities in more than 50 countries. In 2008, NOMX Group acquired Nord Pool Clearing, a CCP in power derivatives and other contracts traded on the

Nord Pool power exchange in Norway. In December 2009, Nord Pool Clearing was incorporated in NOMX STO and its activities have been conducted since then as a Norwegian branch of NOMX STO (see chart and figures below).

**Table 9. Sweden: Key Statistics of NOMX DM, 2006–10**

	2006	2007	2008	2009	2010
1. Number of transactions (thousands)					
1.1 Equities Derivatives	788	765	696	762	870
1.2 Equity Index Derivatives	1.908	3.880	6.683	7.832	8.643
1.3 Fixed Income Derivatives	31	40	53	38	48
<b>TOTAL</b>	<b>2.727</b>	<b>4.685</b>	<b>7.432</b>	<b>8.632</b>	<b>9.561</b>
2. Value of transactions (SEK billions)	4.791	7.490	6.605	576	6.623
3. Average daily value of transactions (SEK billions)	18	29	25	20	26
4. Peak value of transactions (SEK billions)	109	152	116	101	119
5. Number of clearing members of which:	31	37	37	48	46
5.1 Foreign clearing members	9	12	15	26	24
6. Clearing fund (EUR millions)	0	0	0	0	0

Source: NASDAQ OMX.

## Regulatory Framework and Oversight

144. **NOMX STO is authorized as an exchange and has a permit from FI to conduct clearing operations in accordance with the Securities Market Act.** NOMX STO is subject to supervision by FI. As NOMX DM is a secondary legal name (brandname) for NOMX STO, the same legal status and supervision applies to NOMX DM as to NOMX STO. NOMX DM is also subject to the RB's oversight. Both FI and RB cooperate to monitor NOMX DM activities. In conducting their supervisory and oversight responsibilities regarding NOMX DM, FI and RB are using the European standards (ESCB/CERS), which are similar to the RCCPs.

## Main findings

### *Legal framework (Rec. 1)*

145. **NOMX DM clearing activities are subject to well defined legal regime comprising laws, rules, and contractual provisions.** In particular, this legal framework supports the enforcement of transactions, netting procedures, protection of customer assets, and delivery-versus-payment (DvP) with finality. There are adequate rules for addressing the event of a participant default, including the effective use of collateral, and these rules can legally be enforced.

### *Participation requirements (Rec. 2)*

146. **NOMX DM access and exit criteria are well defined and publicly disclosed.** NOMX DM requirements for participants' financial resources and operational reliability are defined according to membership category. All members must be regulated entities and must

have a minimum capital requirement. They also must have adequate operational capability. NOMX DM has procedures in place to monitor participation requirements are met on an ongoing basis. However, direct pledge end customers, that have direct relationships with NOMX DM, are not subject to specific requirements though NOMX DM has direct counterparty risk with them. NOMX DM should set participation requirements for direct pledge end customers.

### ***Financial risk management (Rec. 3–6)***

147. **NOMX DM has a comprehensive risk management framework composed of objectives, measures, and tools.** NOMX DM monitors its participants' exposure on a real time basis, and conducts intraday calls for margins when a specific threshold is hit. NOMX DM regularly validates coverage of the models and parameters used to determine margin requirements.

148. **In the absence of a mutualized default fund, the financial resources set aside to face extreme losses are brought by NOMX STO itself, which might create moral hazard.** They are ring-fenced, but through a highly complex mechanism structure which raises several concerns: high complexity which potentially may result in legal uncertainty and delay in having access to the funds in case of needs, thus a lack of liquidity. Within NOMX STO, both trading and clearing activities are conducted and two different clearing activities are conducted under two different brand names: clearing of financial derivatives by NOMX DM and clearing of commodities products by NASDAQ OMX Commodities Markets (NOMX COM). Though both CCPs do not share the same participants, they share the same “regulatory capital” dedicated to cover losses in case of a member's default. As a consequence, difficulties in one of them could have spillover effects on to the other one. The financial resources do not provide a sufficiently reliable liquidity level. NOMX DM accepts as collateral bank guarantees which by definition are not liquid resources. In addition, these bank guarantees are provided by banks which are also NOMX DM's members, while two of them are the sole liquidity providers. It should be noted that the interest of access to central bank credit is enhanced by the fact that the highly concentrated nature of the Swedish banking sector makes it nearly impossible for NOMX DM to sufficiently diversify its liquidity providers.

149. **NOMX DM default procedures are clearly stated in the system's rules and published on its website.** The structure of customer segregation under the agent clearing model highly facilitates the transfer of collateral and positions of end-customers in case of a member's default.

### ***Custody and investment risks (Rec. 7)***

150. **NOMX DM relies on custodian banks, which are also CCP's members, for collection of collateral, valuation, application of haircuts, compliance with concentration limits.** This current set up is risky as NOMX DM may not have access to the



collateral in case of a custodian default. In addition NOMX DM does not sufficiently monitor the activities of the custodians. NOMX DM has no real time knowledge on the composition of collateral collected as well as no ex post information on it, except when it conducts a test once in a year. Investments are made on high quality securities, though the investment policy is less strict.

### ***Operational risk (Rec. 8)***

151. **NOMX DM identifies and analyses source of operational risks through a framework also encompassing outsourced operations.** NOMX DM has two mirrored sites and a Business Continuity Plan (BCP) in place which is regularly tested. The operational risk is under the scope of Internal Audit.

### ***Money settlements (Rec. 9)***

152. **NOMX DM uses the central bank model for SEK and DKK which represent 99 percent of settlement flows.** Payments made and received by NOMX DM are effected on its accounts with RB and Nationalbank. Payments made and received through commercial banks are negligible and not relevant from a risk management perspective.

### ***Physical deliveries (Rec. 10)***

153. **NOMX DM deliveries of securities are carried out through securities settlement systems that ensure DVP,** thus eliminating the risk of payment without delivery, and its obligations for physical delivery are clearly stated

### ***Risks in links between CCP (Rec. 11)***

154. This recommendation is not applicable since there is no link in place.

### ***Efficiency (Rec. 12)***

155. **NOMX DM reviews its pricing and service levels, as well as capacity level on a regular basis** and it performs periodic benchmarking studies with other CCPs in other European countries to assess its costs and fees.

### ***Governance (Rec. 13)***

156. **Governance arrangements of NOMX DM are clearly specified** and information about them is publicly available on the website. They support robust risk management by a separation in the reporting lines between risk management and other operations. In both the Clearing risk committee and the Default committee, the head of risk management has a veto power. NOMX DM does not sufficiently request feedback on its clearing services from members on a multilateral basis. Participants are not represented on NOMX STO Board or through participant committees within NOMX DM that would bring their specific perspectives and interests.

### ***Transparency (Rec. 14)***

157. **NOMX DM discloses to its clearing members and other market participants its rules as well as relevant documentation in an easy to understand style on its website.** These rules and documents cover, among other things, the rights and obligations of participants, procedures for handling risks, and fees for using its services. NOMX DM has completed a comprehensive self-assessment following the RCCPs assessment methodology.

### ***Regulation and oversight (Rec. 15)***

158. **The basis for an effective regulation and oversight exists.** FI and RB have the ability and the resources to carry out regulation and oversight activities effectively. The responsibilities as well as roles and major policies of FI and RB are clearly defined and publicly disclosed. FI and RB require NOMX DM to provide information necessary for regulation and oversight. However, they do not have a sufficient level of information and understanding of the activities conducted by NOMX COM which would be required by the spillover effects this latter one could have on NOMX STO and notably NOMX DM. FI and RB cooperate with each other and with other relevant authorities, but efficiency gains may be reaped by more effective cooperation and by adopting a more risk based approach.

**Table 10. Summary of the Detailed Assessment of the Observance of NOMX DM with the CPSS-IOSCO Recommendations for Central Counterparties**

Responsibility	Comments
<b>Legal risk</b>	
1. CCPs should have a well-founded, clear and transparent legal basis in the relevant jurisdiction.	<p>The laws and regulations governing the operations of NOMX DM, its rules and contractual provisions for its participants are clearly stated and are readily accessible to participants and the public. The rules and contracts of NOMX DM are enforceable in the case of the insolvency of NOMX DM's participants, and there is a high degree of assurance that actions taken under such rules may not be later stayed, avoided or reversed.</p> <p>However in order to ensure the coherence of rules with time, the FI's approval of changes in the R&amp;R would provide further confidence in maintaining such coherence.</p>
<b>Participation requirement</b>	

Responsibility	Comments
<p>2. A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met in an on-going basis. A CCP's participation requirements should be objectives, publicly disclosed, and permit fair and open access.</p>	<p>NOMX DM has established membership requirements and procedures in place to ensure that its members have sufficient financial resources and robust operational capacity to ensure timely performance by its members. Participation requirements are objective, permitting fair and open access and there are no requirements that limit access on grounds other than risks and participation requirements are clearly stated and publicly disclosed.</p> <p>However, direct pledge end customers, that have direct relationships with NOMX DM, are not subject to specific requirements though NOMX DM has direct counterparty risk with them.</p>
<p><b>Measurement and management of credit exposures</b></p>	
<p>3. A CCP should measure its credit exposure to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in normal market conditions so that the operation of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.</p>	<p>NOMX DM measures exposures of members on an intraday basis and at the end of the day. The information on which the calculations are based is timely. Based on these measures, NOMX DM call margins at the end of the day and on an intraday basis when margin requirements hit a specific threshold.</p>
<p><b>Margin requirements</b></p>	
<p>4. If a CCP relies on margin requirements to limit its credit exposures to participants, these requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.</p>	<p>The margin requirements set by NOMX DM cover its potential exposures to its clearing members' positions in normal market conditions.</p> <p>NOMX DM accepts as collateral to meet margin requirements bank guarantees which by definition are not liquid resources. In addition, these bank guarantees are provided by banks which are also NOMX DM's members, while two of them are the sole liquidity providers. In addition there is a risk of sectorial concentration of the collected collateral: for instance banks may represent about 30 percent of collected collateral on a specific day.</p>
<p><b>Financial resources</b></p>	

Responsibility	Comments
<p>5. A CCP should maintain sufficient financial resources to withstand, at a minimum, the default of a participant to which it has the largest exposure in extreme but plausible market conditions.</p>	<p>Based upon its stress test procedures, NOMX DM has sufficient financial resources to withstand at a minimum a default by the clearing member to which it has the largest exposure in extreme but plausible market conditions. However, both CCPs within NOMX STO share the same “regulatory capital” dedicated to cover losses in case of a member’s default. This means that though both CCPs do not share the same participants (only a few are in common and not active in both) and treat very different products, they share the same financial protection to face extreme losses. As a consequence, difficulties in one of them would spillover on to the other one.</p> <p>Financial resources set aside to face extreme losses are brought by NOMX STO and ring-fenced, but through a highly complex mechanism from the legal entity balance sheet. The “clearing capital is only partly funded and its coverage is very complex, with the use of insurance guarantee, itself being guaranteed by a bank guarantee, with securities being collateralized. This structure raises several concerns: high complexity which potentially may result in legal uncertainty and delay in having access to the funds in case of needs.</p> <p>The financial resources do not provide a sufficiently reliable liquidity level. Liquidity comes from the part of “clearing capital” invested in securities (held in only one bank which is also a CCP’s member) and two liquidity lines provided by the two same banks referred above.</p>
<p><b>Default procedures</b></p>	
<p>6. A CCP default procedures should be clearly stated, and should ensure that the CCP can take timely action to contain losses and liquidity pressure and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.</p>	<p>The default procedures are clearly described in the R&amp;R and permit to close out or manage appropriately the positions of the defaulting clearing members. The structure of customer segregation under the agent clearing model highly facilitates the transfer of collateral and positions of end-customers in case of a member’s default. NOMX DM has an internal plan in place that clearly delineates the responsibilities for managing customers’ positions in default and for drawing on financial resources.</p>
<p><b>Custody and investment risk</b></p>	

Responsibility	Comments
7. A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.	NOMX DM has no real time knowledge on the composition of collateral collected as well as no ex post information on it, except when it conducts a test once in a year. NOMX DM relies on Custodian Institutions, which are also CCP's members, for collection of collateral, valuation, application of haircuts, compliance with concentration limits. Controls on Custodian Institutions are delegated to an outside body which may conduct inspections.
<b>Operational risk</b>	
8. A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. BCPs should allow for timely recovery of operations and fulfillment of a CCP's obligations.	NOMX DM identifies and analyses source of operational risks through a framework also encompassing outsourced operations. NOMX DM has two mirrored sites and a BCP in place which is regularly tested. The operational risk is under the scope of Internal Audit.
<b>Money settlements</b>	
9. A CCP should employ money settlement arrangements that should eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risk from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected.	NOMX DM uses the central bank model for SEK and DKK which represent 99 percent of settlement flows. Payments made and received by NOMX DM are effected on its accounts with RB and Nationalbank. Funds transfers to NOMX DM's accounts are final when effected. Payments made and received through commercial banks are negligible and not relevant from a risk management perspective.
<b>Physical deliveries</b>	
10. A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.	NOMX DM's R&R clearly set its obligations with respect to deliveries of securities. NOMX DM uses securities settlement systems that ensure the DvP. NOMX DM has not implemented a penalty regime in case of late delivery while some new participants are a source of late delivery.
<b>Risks in links between CCPs</b>	
11. CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination among the relevant regulators and overseers.	Not applicable.

Responsibility	Comments
<b>Efficiency</b>	
12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.	NOMX DM has in place the mechanisms to regularly review its cost and pricing as well as its service levels and operational reliability. NOMX DM also benchmarks its costs and fees with other CCPs, but considers that due to differences in the nature of the services and markets, the results have to be considered with caution.
<b>Governance</b>	
13. Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a CCP's risk management procedures.	Governance arrangements of NOMX DM are clearly specified and information about them is publicly available on the website. The governance arrangements support robust risk management by a separation in the reporting lines between risk management and other operations. The Board and the management are accountable for NOMX DM's performance. The objectives include delivering sound risk management. However, there is a lack of users' feedback and involvement through consultative user groups. NOMX DM does not sufficiently request feedback on its clearing services from members on a multilateral basis. Participants are not represented on NOMX STO Board or through participant committees within NOMX DM that would bring their specific perspectives and interests.
<b>Transparency</b>	
14. A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the costs and risks associated with using its services.	NOMX DM discloses a wide range of information, both in Swedish and in English, which its members can use to evaluate the risks of using the CCP services.
<b>Regulation and oversight</b>	

Responsibility	Comments
15. A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should co-operate with each other and with other relevant authorities.	<p>The basis for an effective regulation and oversight exists. FI and RB have the ability and the resources to carry out regulation and oversight activities effectively. However authorities could have been more proactive regarding NOMX DM collateral management system. For years, the authorities have had knowledge of the set up for collecting margin which is fully outsourced to Custodian Institutions and which involves risks for NOMX DM (see recommendation 7). They had mentioned in their annual assessments that such set up was a concern but they did not request or seek to induce changes to that situation.</p> <p>The responsibilities and roles of FI and RB are clearly defined and publicly disclosed. However, they do not have a sufficient level of information and understanding of the activities conducted by NOMX COM which would be required by the spillover effects this latter one could have on NOMX STO and notably NOMX DM.</p> <p>FI and RB cooperate with each other and with other relevant authorities. The exact respective responsibilities regarding NOMX COM, both in normal times and in crisis situation, among Norwegian and Swedish authorities is not fully clear among the concerned authorities.</p>

**Table 11. Key Recommendations**

<i>Reference Recommendation</i>	<i>Recommended Action</i>
Recommendation 2: Participation requirements	NOMX DM should set participation requirements for direct pledge end customers. It should be noted that NOMX DM has started a process for possibly setting requirements for such end customers.
Recommendation 4: Margin requirements	NOMX DM should not accept bank guarantee as collateral due to the fact that such collateral is not liquid and that providers of such guarantees are NOMX DM's members.

<i>Reference Recommendation</i>	<i>Recommended Action</i>
Recommendation 5: Financial resources	<p>NOMX DM should overhaul the complete structure on which its regulatory capital is based and implement a more straightforward and fully funded framework.</p> <p>Two totally ring-fenced capital bases for both NOMX DM and NOMX COM should be set up. Based on the envisaged set up of a mutualized guarantee fund to fulfill likely requirements set by EMIR, this should result in two separated guarantee funds for NOMX DM and for NOMX COM being set up.</p> <p>Swedish authorities should thoroughly explore the possibility to legally separating clearing activities from trading activities currently being conducted within the same legal entity.</p> <p>NOMX DM should enhance its liquidity framework. It should ensure that the collateral collected present a high degree of liquidity and consequently bank guarantees should be excluded. NOMX DM should raise the number of its liquidity providers (only two currently). NOMX DM should put in place the operational set up so that it can use, in case of needs, the intraday liquidity that may be provided by RB.</p>
Recommendation 7: Custody and investment risks	NOMX DM should completely overhaul its current custodian arrangements and rely on CSDs. NOMX DM should review its investment policy and analyze whether there is a need to strengthen it through restricting investment to the highest rated securities, for instance AAA securities as currently done in practice.
Recommendation 13: Governance	NOMX DM should enhance member's involvement in clearing activities through their adequate representation, for instance through a formal advisory committee.
Recommendation 15: Regulation and oversight	<p>Swedish authorities should clarify in practical terms with Norwegian authorities the exact sharing of responsibilities among themselves regarding NOMX COM, both in normal times and in crisis situation, and consequently adapt their supervision and oversight.</p> <p>Swedish authorities should enhance their knowledge of activities conducted by NOMX COM, due to the spillover effects this latter one could have on NOMX STO and notably NOMX DM.</p>



<i>Reference Recommendation</i>	<i>Recommended Action</i>
	<p>The authorities should operationalize for clearing activities the MOU on cross border financial stability among MOF, central banks and FSAs in Nordic countries, signed in August 2010.</p> <p>FI and RB should formalize the routines and procedures of their cooperation in order to increase exchange of information, to possibly share or allocate specific tasks among themselves, to enhance their common analysis capacity, and to gain efficiency beneficial for both parties. As an example for information sharing, this routine could comprise common reporting requirements that would allow the authorities to get regular and frequent updated data from NOMX DM.</p> <p>Authorities should analyze whether an annual assessment is necessary or whether a less frequent review could be contemplated combined with a more risk based approach.</p> <p>Authorities should strive to strengthen their staffing resources with skills in quantitative analysis in order to be in a position to directly assess (and/or be able to critically review reports which are ordered to external consultants) quantitative models used to calculate margins and financial resources.</p>

**Table 12. Additional Recommendations**

<i>Reference Recommendation</i>	<i>Recommended Action</i>
Recommendation 1: Legal risk	FI should approve any substantial changes in the R&R in order to ensure that the rules stay consistent with the whole risk management framework.
Recommendation 10: Physical deliveries	NOMX DM should implement a penalty system for failed delivery.
Recommendation 12: Efficiency	The satisfaction survey conducted by NOMX DM every year should include questions on clearing services.
Recommendation 15: Regulation and oversight	RB as an overseer should explore with central banks in Denmark, Finland and Norway, whether they have an interest to participate in an oversight arrangement for NOMX DM.

### **Authorities' response to the assessment**

159. **The Swedish authorities welcome the detailed assessment of NASDAQ OMX Derivatives Markets carried out by the IMF.** The recommendations are constructive and we look forward to using them in our supervisory and oversight processes. Work has already been initiated in **response** to many of the views expressed in the assessment and plans are being developed in order to analyze the remaining comments. The Swedish authorities have the following comments to the recommendations currently graded as not fully observed by IMF.

## ***Recommendation 2: Participation requirements***

160. The assessment correctly states that a process for setting specific requirements for direct pledge clients is under way. The Swedish authorities agree with the recommendation and are following the progress and development closely.

## ***Recommendation 4: Margin requirements***

161. NASDAQ OMX Derivatives Markets (NOMX DM) currently accepts bank guarantees as **collateral** for clearing, which according to the assessment is undesirable as they are illiquid and rely on institutions which are also members of NOMX DM. The recommendation is sensible and the Swedish authorities will enter into discussions with NOMX DM about the use of bank guarantees as accepted collateral.

## ***Recommendation 5: Financial resources***

162. In order to adjust to coming European regulation, NOMX DM is running a project to **introduce** a default fund. The Swedish authorities follow this project and will give recommendations to NOMX DM on how to set up its financial resources in the future. Furthermore, a review of the liquidity framework is also taking place. The Swedish authorities will further consider the recommendation given regarding legal separation of clearing and trading.

## ***Recommendation 7: Custody and investment risks***

163. NOMX DM is, as expressed in the assessment, currently in the middle of a project aiming to introduce a new collateral management system in 2012. Swedish authorities are monitoring the progress, which will address the current shortcomings.

## ***Recommendation 13: Governance***

164. Swedish authorities will, in line with the assessment, engage NOMX DM to ensure that members are appropriately involved in the governance, also when it comes to the clearing activities. Further involvement from the members will most likely also come natural due to other developments within NOMX DM.

## ***Recommendation 15: Regulation and oversight***

165. Relevant points were brought up in the assessment, and the comments are taken seriously by the Swedish authorities.

## APPENDIX I: SUMMARY OF KEY RECOMMENDATIONS OF THE 2002 FSAP AND THEIR IMPLEMENTATION

Recommendations	Reported Action
<b>Banking</b>	
Improve capacity to supervise particularly the more complex activities of the banks.	Enhanced resources, strengthening of specialist units and reorganisation of internal structure to focus on the more complex banks.
Fit and proper tests to be applied to all members of a bank's management. FI to have powers to require changes to board membership due to weakness of board members.	Scope of personnel covered by fit and proper tests has not changed since last assessment. Powers with respect to FI's intervention with a board have been expanded.
Enhanced FI's powers, including to require a bank to strengthen its lending practices, provisions, reserves and apply limits to on connected lending.	Powers now in place to require strengthening of lending practices and increased capital in instances of under provisioning. FI can use individual limits on connected lending as a sanction tool in case of unacceptable risk management.
Reporting requirements and guidance to be enhanced, including on geographical concentrations, connected lending, country risk.	A draft proposal for enhanced reporting has been developed for IRB banks. Detailed guidance has not been issued on connected lending.
Relevant MOUs to be agreed; lead supervision to be put in place; powers to circumscribe a firm's foreign activities or establishment of a branch; powers to assess equivalence of host jurisdictions and prevention of incoming (non-EEA) branch where host is not equivalent or has not provided consent.	Considerable progress on MOUs, active lead supervision role by FI; powers granted to limit activities or branching cross border; active assessment of non-EEA host jurisdictions.
Supervisor to have a wider array of legally binding measures. Laws to exclude possibility of regulatory forbearance.	FI states that it has a wide range of tools but that the regulations were in place in 2002 also. Forbearance is not prohibited.
<b>Insurance</b>	
Strengthen staff resources in order to fulfil FI's legal tasks.	While staff resources have increased since 2002, more may be needed in certain areas.
Introduce reporting requirements on outsourcing arrangements and guidelines to auditor.	Not implemented. FI review insurers outsourcing, especially in major insurers or groups.
Enhance licensing requirements including clarifying and extending fit and proper test to senior management/key persons of insurers.	Not implemented. Requirements apply only board members and the CEO.
Require mandatory annual reports on risk management report by insurers.	Submission is not mandatory. FI reviews such information in supervising major groups and undertakings.
Review the normal distribution assumption used for analysing technical provisions of non-life insurers.	FI's current practice is no longer dependent on any probability distribution.
Establish disclosure requirements for derivatives and off-balance sheet items.	Not implemented. Work is in progress.
Implement supervisory procedures to ensure compliance with market conduct requirements.	Compliance is part of FI's supervisory focus. Insurers have to appoint compliance officers.

Set up a legal basis for issuing a formal criticism.	FI is empowered to do so.
Enhance reporting by actuaries.	Not implemented. The role of the responsible actuary is limited by the insurance Act.
Supervise branches of Swedish insurers in the EEA.	Swedish branches in the EEA are supervised subject to resources available.
<b><i>Securities Markets</i></b>	
Need for greater powers for FI over licensees.	Done. FI can now levy fines, restrict a firms business, require more capital, etc.
Need for greater powers for FI over third parties when conducting investigations.	Largely done though the power to compel information is lacking.
FI should increase its resources in the supervision and inspection of licensees, exchanges and clearing systems.	Done. Risk based supervision has also been introduced.
Need to improve licensing and supervision of collective investment schemes with particular regarding management of conflicts of interest and asset valuations.	Done. More resources are applied to this area. Board members and CEOs are subject to an initial fit and proper test, conflicts management is reviewed and supervised, scheme rules must address over-the-counter (OTC) asset valuations.
Improve risk management in the clearing and settlement entity and strengthen supervision.	Done. Euroclear (Sweden) has corrected the problems identified. Annual assessments against the ESCB/CESR Principles for securities settlement system are carried out jointly by FI and the RB.
Strengthen supervision of the Stockholm stock exchange (now NOMX) with particular regard to its role as supervisor of listed companies.	Done. Significantly more resources devoted to this area. Prospectus review by FI has also been strengthened.
Review powers and processes for managing a licensee's failure for possible weaknesses.	Specific identified areas are not commented on. MOU for crisis management signed with RB and MOF. Cross border scenario/stress situations regularly undertaken re Nordea and NOMX. System successfully tested in the recent crisis.

## APPENDIX II: RISK ASSESSMENT MATRIX

Nature/Source of Main Threats	Likelihood of Severe Realization in the Next Three Years	Expected Impact on Financial Stability if Threat is Realized
Strains in wholesale funding	<p><b>Staff assessment: Medium</b></p> <ul style="list-style-type: none"> <li>• Sovereign and financial sector risks in vulnerable economies lead to broad contagion across borders, and strains in wholesale funding markets may worsen.</li> </ul>	<p><b>Staff assessment: High</b></p> <ul style="list-style-type: none"> <li>• If market strains severely intensify, Swedish banks may face risks of refinancing, including lower refinancing and higher funding rates. The Riksbank's ability to support a foreign currency liquidity shortage is limited,</li> <li>• To comply with the new liquidity regulations, Swedish banks may need to extend the maturity of funding, leading to an increase in lending rate, a reduction of lending, or lower profitability for banks.</li> </ul>
Sharp “double dip” recession	<p><b>Staff assessment: Medium</b></p> <ul style="list-style-type: none"> <li>• Global growth momentum, notably in the United States and Europe, deteriorates sharply due to various factors such as sovereign risk, bank funding, unfinished regulatory reform, weakness in real estate, markets, diminishing fiscal stimulus, or high unemployment.</li> <li>• This will reduce demand for Swedish exports, and jeopardize consumer and business confidence, resulting in persistent high unemployment, a decline in corporate profits, and an increase in bankruptcies in Sweden and countries where Swedish banks operate.</li> </ul>	<p><b>Staff assessment: Medium</b></p> <ul style="list-style-type: none"> <li>• As a small open economy, with deep trade sector and external financial sector linkages, Sweden is highly exposed to the global economy.</li> <li>• Due to its extensive cross-border operations, the financial system itself is highly exposed to global economic and financial conditions.</li> <li>• Bank asset quality would be adversely affected through various transmission channels including increased unemployment, deteriorating corporate earnings, and a sharp correction in real estate prices.</li> </ul>
Housing price correction in Sweden	<p><b>Staff assessment: Medium</b></p> <ul style="list-style-type: none"> <li>• By some measures, house prices are moderately overvalued.</li> <li>• Already high levels of household indebtedness with loans taken at a variable interest rate.</li> <li>• Household debt service capacity may deteriorate when interest rates increase.</li> </ul>	<p><b>Staff assessment: High</b></p> <p>Banks' loan losses increase moderately through a direct impact from an increase in nonperforming mortgage loans, and an indirect impact through weaker economic growth.</p>

Severe recession in the Baltic region	<p><b><i>Staff assessment: Medium</i></b></p> <ul style="list-style-type: none"> <li>• The Baltic economies have recovered with GDP growth forecasted to be above 3 percent annually for the coming three years.</li> <li>• However, the recovery may be halted if European economy significantly slows down.</li> </ul>	<p><b><i>Staff assessment: Medium</i></b></p> <p>Asset quality deteriorates, directly raising Swedish banks' loan losses, although concentrated in two banks.</p>
---------------------------------------	--	---

### APPENDIX III: SWEDEN: STRESS TESTS FOR BANKS

		Solvency Stress Tests		Liquidity Tests
		Scenario Tests	Sensitivity Tests	
1	Who performed the tests	Two sets of stress tests conducted by i) the FSAP team; and ii) the authorities.		Riksbank (RB).
2	Institutions covered	Four largest banks, 90 percent of bank assets.		
3	Assessment date and type of data	Q3 2010 supervisory data and Moody’s KMV data.		Liquidity data collected by a private company.
4	Risk horizon	5 years (2011-15)	Instantaneous.	3 months and 1 year
5	Metrics (hurdle rates)	8 percent CAR, 4 percent Tier 1, and 6 percent Tier 1 ratios.		Similar measures to Basel III LCR and NSFR.
6	Positions and risk factors included	<ul style="list-style-type: none"><li>All on- and off-balance sheet positions.</li><li>Risks include credit risk, sovereign market risk (banking and trading books), funding risk, and contagion/spillover risks (captured by the systemic CCA).</li></ul>	<ul style="list-style-type: none"><li>Credit risk arising from interbank exposures.</li><li>Credit risk arising from the largest three exposures.</li></ul>	Funding and liquidity risks arising from an outflow of short-term funds and structural maturity mismatches between assets and liabilities.
7	Severity of macro-scenarios	<ul style="list-style-type: none"><li>Baseline: October 2010 World Economic Outlook (WEO).</li><li>Scenario 1: Deviations in GDP growth by 2.7 percentage points in 2011 and 3.2 percentage points in 2012 compared to WEO baseline..</li><li>Scenario 2: Twice the deviations of scenario 1 from baseline.</li><li>Scenario 3: Prolonged low-growth similar to 2008–09 downturns.</li></ul>	<ul style="list-style-type: none"><li>Default of another bank.</li><li>Default of the largest three exposures.</li></ul>	n.a.
8	Methodology	<ul style="list-style-type: none"><li>Balance sheet approach and systemic CCA.</li><li>Mission model: expected losses calculations were based on the elasticities used in the CEBS stress testing exercise in 2010, and RWA calculations were based on the Basel II AIRB approach. Credit growth assumption: 0 percent, payout ratio: 0 percent.</li><li>Authorities’ model: expected losses, RWAs, and credit growth calculations were based on the authorities’ satellite models. Payout ratio: 40 percent.</li><li>Bank stress profits/losses were estimated as market consensus net operating income (after applying a haircut on fees and commissions income) less the estimated stressed funding cost, losses generated by the sovereign yield shock, and expected loan losses.</li></ul>	Authorities’ routine stress tests for large exposures and contagion risk.	Assumptions on deposit withdrawal rates and refinancing of wholesale funding. Haircuts applied to liquid assets.