SPEECH

DATE:	31 January 2017
SPEAKER:	First Deputy Governor Kerstin af Jochnick
VENUE:	Centre for Business and Policy Studies, Stockholm

SVERIGES RIKSBANK
SE-103 37 Stockholm
(Brunkebergstorg 11)

Tel +46 8 787 00 00
Fax +46 8 21 05 31
registratorn@riksbank.se
www.riksbank.se

The completion of Basel III – the start of something new*

The work of the Basel Committee is important and affects Sweden

Good morning. Thank you to the Centre for Business and Policy Studies for inviting me here to talk about Basel III and what it may entail for Sweden.

Recently there have been several attempts by different parties to analyse how the Basel Committee's completion of the Basel III Accord may affect the global financial system. Some people question whether it is really necessary for the regulation of banks' capital requirements to be amended yet again, and wonder how this will affect, for instance, the Swedish banks. As I have recently, in my capacity as member of the Basel Committee, been involved in discussing various parts of Basel III, I would like to give my own views on the subject today. I hope this will answer some of the questions now being raised.

However, I would like to point out from the start that no *final* agreement on the finalisation of Basel III has yet been achieved. Still, the main features of the agreement are relatively clear at this point, and the Basel Committee is now working on the final details. However, I do not intend to focus on the details today, as they are many, but instead on the fundamental blocks on which Basel III is built.

The reforms of banking regulation that lie ahead will strengthen global financial stability and this will be good and important for Sweden, which is a small and open economy. Moreover, it is largely Swedish authorities that determine how, more exactly, Basel III will affect the Swedish banking system.

But I shall begin by providing some perspective on banking regulation in general and the work of the Basel Committee in particular. And let me point out that what I will talk about today is neither the first nor the last amendment to the regulatory framework for banking operations to see the light of day. The work on developing and revising the bank regulations is a continuous operation and should be so. I usually

* I would like to thank Tomas Edlund for his help with this speech.

compare this task with cycling; if you stop pedalling then sooner or later you will fall off. One reason for this is that society is developing and changing over time. New values gain ground and new experiences are added to old. This is a general feature of standards and rules in society and it also applies to banking regulation.

To be a little more specific. Sixty years ago, anyone wanting to start a bank was forced to get permission to do so from His Majesty the King. This was a system that was probably considered reasonable and well-balanced bearing in mind the environment in which the banks then operated. Today it is natural that Finansinspektionen should give Swedish banks licence to conduct their operations, but the number of new banking regulations has also increased over the past 35 years. The banks' change in significance for society, internationalisation and the complexity of both financial markets and financial instruments have all meant that the Riksdag (the Swedish parliament), the Government and Finansinspektionen need to both adapt existing regulations and develop new ones. It is a major challenge for society and a complex balance to ensure that regulation of the banks safeguards financial stability at the same time as contributing to efficient markets, good competition and good consumer protection.

But as I mentioned earlier, it is not only values that change over time, but we also gain new experiences and draw conclusions from these. One event that forms a base for modern banking regulation took place in the 1970s. This is when the system with fixed exchange rates was abandoned, the Bretton Woods system that had been agreed on decades earlier by the world's leading economies. In the wake of this, a number of internationally-active banks became insolvent due to losses linked to transactions in foreign currencies. The most famous of these is probably the West German bank Herstatt, which I expect many of you have heard of.

As a result of the ensuring financial unease, the central bank governors of the G10 countries agreed to form what would later be known as the Basel Committee. This committee had its first meeting at the beginning of 1975 and its purpose was then and still is that the representatives of the member countries shall cooperate on issues regarding the supervision and regulation of internationally active banks. This is to reduce the risk of global financial crises occurring.

Sweden has been a member of the Basel Committee since its start. I myself have been the Riksbank's representative in this context for some years now. Finansinspektionen also takes part in the Basel Committee meetings.

Smoothly-functioning international cooperation between central banks and financial supervisory authorities is very important to financial stability in a small and open economy like Sweden's. We know from experience that other countries' problems can soon become our own. It is thus extremely important that we are involved in influencing the work in these international contexts in the right direction. It also creates good conditions for the banks to conduct their operations in several countries, if the regulation in these countries meets certain minimum standards and the supervisory authorities are in tune with one another.

The changes in the Swedish credit markets at the end of the 1980s and EU membership in 1995 made it easier for Swedish banks to expand onto an international market than it had been before. With hindsight, we can observe that

this took place at the same time as the existing bank regulation was not always able to adapt to new situations sufficiently fast.

Financial crises are costly and affect us all

Reducing the risk of financial crises is something the Basel Committee has worked on from the start. This work is important to all of us, as financial crises lead to substantial costs for society and often to permanent falls in GDP and employment. All too often it takes a very long time to recover from such crises. Even today, almost 10 years after the most recent financial crisis broke out, many countries are struggling with low growth, high unemployment and excessively low inflation.

Looking at the historical development of GDP in Sweden, we see two clear falls: during the financial crisis in the early 1990s and during the most recent global financial crisis. The size of the fall after the most recent financial crisis corresponds to the total expenditure of all of Sweden's county councils during one year.[1] Having said this, the conclusion is of course that the work on avoiding financial crises in the future is very important, not least to safeguard essential functions in society such as care and welfare, which we often take for granted.

Given this, there is a lot of international work on trying to alleviate the consequences for the economy when the banking system is subject to shocks. For instance, several countries have developed a framework within the Financial Stability Board (FSB) for how banks in distress can be wound up without too much impact on taxpayers. This framework has been introduced through an EU directive into Swedish legislation in the act on resolution. I welcome these standards.

But in addition to these standards regarding resolution, it is important that we conduct global crisis prevention work that *reduces* the risks that banks will suffer problems. And as I mentioned, this work is largely done within the scope of the Basel Committee.

Why are globally-harmonised capital requirements a good idea?

Much of the Basel Committee's more than forty years of work has concerned capital levels in the banks, and for good reasons. Then as now, our assessment is that well-capitalised banks benefit financial stability and contribute to a positive development in society. Banks that are well-capitalised are more resilient to losses and have greater capacity to obtain market funding during times of financial unease. In other words, the risk of a financial crisis declines if the banks are well-capitalised.

Up until the end of the 1980s, the regulatory frameworks for banks' capital levels were relatively different in different countries. In many areas, the existing capital requirements were considered outdated and in need of revision. The various national regulations also contributed to limiting the banks' possibilities to compete on equal terms.

---

[1] SEK 310 billion, according to the Swedish Association of Local Authorities and Regions. (https://skl.se/ekonomijuridikstatistik/ekonomi/sektornisiffror.1821.html)

Consequently the Basel Committee presented the so-called Basel I Accord in 1988. This was implemented into Swedish legislation in the early 1990s. Basel I was the first internationally-agreed minimum standard for capital levels to be held by internationally-active banks. It is worth noting here that the Basel Committee agrees on minimum standards. All countries are free to introduce stricter national requirements regarding their banks' capital levels if they find it appropriate. This is something the Basel Committee encourages its members to do.

The idea behind Basel I was, somewhat simplified, that the banks with assets assessed as less risky had a lower capital requirement than the banks with assets assessed as more risky. The regulations were simple and consisted of only a few risk categories. But this meant that one could take into account that the risk of losses was greater for banks with more risky assets than for banks that had more assets that were less risky. The banks' capital could thus be distributed through regulation in a way assessed to increase efficiency in the economy.

Basel I lead to the introduction of some new concepts, such as *risk weights* and *risk-weighted assets*. Risk-weighted assets were calculated, to put it simply, by first giving the banks' different assets risk weights of between 0 and 100 per cent, depending on how risky they were assessed to be. For instance, the banks' mortgages were given a risk weight of 50 per cent. A bank's risk-weighted assets were then calculated by multiplying the value of the respective type of asset by the respective risk weight.

Basel I meant that the banks should have capital exceeding eight per cent of the bank's risk-weighted assets. This requirement still applies, although the content of both the banks' capital and their risk-weighted assets have changed over time.

Basel II and III entailed more risk-sensitive capital requirements and increased model risks

At the beginning of the 1980s, several countries deregulated parts of their credit markets. As a result, the banking systems in many countries rapidly became more complex and even more internationally interlinked than before. New types of more complex financial instrument were introduced. Moreover, new and more advanced methods for measuring risk and risk management were developed and refined by most of the banks.

Many agents, including the Basel Committee, assessed that Basel I needed to be reworked to become more risk-sensitive and to better reflect developments in the banks and in society. The banks were keen on pushing this question as they wanted to use their own methods for calculating capital requirements. In 2004, the so-called Basel II Accord was published. This regulatory framework was incorporated into Swedish law and in many other countries at the beginning of 2007.

One of the main differences with regard to Basel I, was that Basel II made it possible to apply different methods to calculate risk-weighted assets and capital requirements. As you probably know, some banks were able, after approval by the financial supervisory authority, to use so-called internal models to calculate their risk-weighted assets. This reform was intended to increase the link between the banks' capital requirement and their actual risks, which was also largely the case and thus generally improved the banks' risk management.

However, the use of internal models also entailed a risk that the banks' calculation of the capital requirements would not reflect the actual conditions. The risk that the banking system would not have sufficient capital to manage the risks arising from the banking operations thus increased. As the banks themselves were given the opportunity to influence their capital requirements, their incentives to underestimate the risks and thus reduce the capital requirements, increased. It is also difficult to determine how much capital a bank actually needs to manage a crisis situation.

Soon after the Basel II Accord had been reached, the major international financial crisis broke out with the bankruptcy of the US bank Lehman Brothers. It then became clear that many banks lacked sufficient resilience to the sudden changes in the financial markets. It also became clear that the current regulations for the banks did not sufficiently manage the risks to which the banking system was exposed. One conclusion drawn by the Basel Committee was that some banks had neither enough capital nor sufficiently good quality of capital to be able to manage the losses that arose. Another conclusion was that global regulation was needed regarding the banks' liquidity risk management.

A new reform work aimed at remedying these shortcomings and supplementing Basel II was begun by the Basel Committee. In 2010, a package of new reforms was presented in the form of what is usually termed the Basel III. The main aim was to strengthen the bank´s capital and to introduce new requirements regarding their liquidity management.

The work on finalising Basel III is now being completed. When this work is done, what remains is for the Basel Committee members to incorporate the new regulations into their national legislation. This will probably be a time-consuming process. Sweden will be dependent on how this will be incorporated into EU regulations and directives and we will of course be involved in this work.

I will now turn to some of the changes the coming bank regulation will entail.

A leverage ratio requirement counteracts unhealthy build-up of debt

One lesson from the financial crises we have experienced is that most of them have their origins in one or more actors having borrowed far too much money. The larger the debt, the more serious the problems will be in a crisis situation.

It is in this context that it is important that we are now introducing a requirement that is not risk sensitive to complement the risk-weighted capital requirement. The leverage ratio requirement is a simple and transparent measure that will limit the banks' capacity to borrow too much regardless of what operations they conduct. More specifically, a bank's leverage ratio is its capital in relation to its total assets. The Basel Committee has previously agreed on a lowest leverage ratio requirement for banks of three per cent and for global systemically important banks an even higher leverage ratio requirement.

For the last two years, the Riksbank has been recommending that a leverage ratio requirement of five per cent should be introduced gradually for the four major

Swedish banks. However, it is not self-evident what level the leverage ratio requirement should have. There are several academic studies in this field which indicate that a leverage ratio requirement should be much higher than the levels now being discussed. One reason for this is that the risk-weighted requirement plays less of a role in a crisis situation. It is then the value of the assets that is important, together with the quality and size of the equity capital.

The Riksbank, like the IMF and the OECD, has pointed to several reasons why a higher level than the minimum requirement should be applied. The Swedish banking system is large from an international perspective and Swedish banks have extensive operations in the Nordic and Baltic countries. Further, the banking system is concentrated to a few large banks and these are tightly interconnected. This means that financial unease can spread and problems in one major bank can affect not only the Swedish financial market, but our entire region. Several other countries with large banking systems have introduced or are planning to introduce leverage ratio requirements of around 5 per cent.

So the introduction of a global leverage ratio requirement is a step in the right direction, but we on the Basel Committee have agreed that further measures are needed to reinforce global financial stability and reduce the risk of future financial crises.

The internal models have caused confidence to decline...

In recent years, confidence in the banks' internal models and calculations of risk weights has declined. Regulators as well as banks and market participants have begun to doubt whether the capital requirements reflect the banks' risks in a correct way and whether they enable comparable capital relations between different banks. In many countries the banks' risk weights have fallen substantially over time. This has been evident with regard to the major Swedish banks over the past ten years. It is largely because the use of internal models has increased during this period.[2]

...and have led to major differences between the banks, so now the framework will be changed...

Around three years ago, the Basel Committee published several reports where they analysed several globally-active banks' capital requirements calculated using internal models.[3] One conclusion from the work was that there are major differences in the banks' risk weights that cannot be explained by differences in underlying risk.

As a result of this, among other things, the Basel Committee has discussed reducing the degree of freedom given to the banks with regard to some of the models. This concerns, for instance, the banks' exposures to large corporates and other banks. In addition, they have discussed further measures in the framework for the banks' internal models to reduce the differences in risk weights and capital requirements

---

[2] See Finansinspektionen's report "*Stability in the Financial System, December 2014*", http://www.fi.se/upload/43_Utredningar/20_Rapporter/2014/stab2_2014ny.pdf

[3] See for instance the BIS publication "*Analysis of risk-weighted assets for credit risk in the banking book*", http://www.bis.org/publ/bcbs256.pdf

between different banks. Let me make myself clear here. There is no doubt that the banks' internal models will continue to be an important component when determining the banks' capital requirements.

The constraints I have mentioned here will, if they are introduced, limit the banks' freedom with regard to using internal models. At the same time, they will increase confidence in the banks' capital levels and make it easier to compare the banks.

Nevertheless, there still remain a number of challenges for banks and financial supervisory authorities with regard to internal models. For instance, the calculation of a bank's risk-weighted assets may mean that several thousand parameters must be calculated. Therefore, it is almost unnecessary to point out that the complexity of the calculations of the banks' capital requirement can be considerable. It is then natural that some form of safety net is needed, to ensure the banks' risk weights do not fall too low.

...and a floor for risk-weighted assets will be introduced

The Basel Committee has therefore discussed introducing a new floor for risk-weighted assets that prevents them from falling too low. The Basel II Accord contained this type of floor, but it has been implemented in different ways in different countries and now needs to be revised. The new floor will in practice mean that no bank is allowed to have risk-weighted assets below a percentage of what they would have been if the Basel Committee's standardised methods had been used. Within the scope of these standardised methods, the banks are not given the opportunity to use internal models to determine risk weights. These standardised methods are currently used by smaller banks that do not use internal models.

There are several other reasons for this proposal as well. In addition to the fact that a floor would contribute to increased transparency it will make it easier to compare banks' capital levels over time. This will enhance confidence in bank's capital ratios. Moreover with the introduction of a floor for risk weighted assets, small banks could compete with large ones on more similar terms. This is because small banks generally use standardised methods and not internal models. It is therefore a good idea to have a floor for how low the banks' internally-calculated capital requirements may be in relation to the capital requirements for small and medium-sized banks. This is a reasonable balance to ensure that competitiveness is not disrupted.

So the future regulation of the banks' capital levels will probably contain a leverage ratio requirement, a risk-weighted capital requirement and a floor for risk-weighted assets.

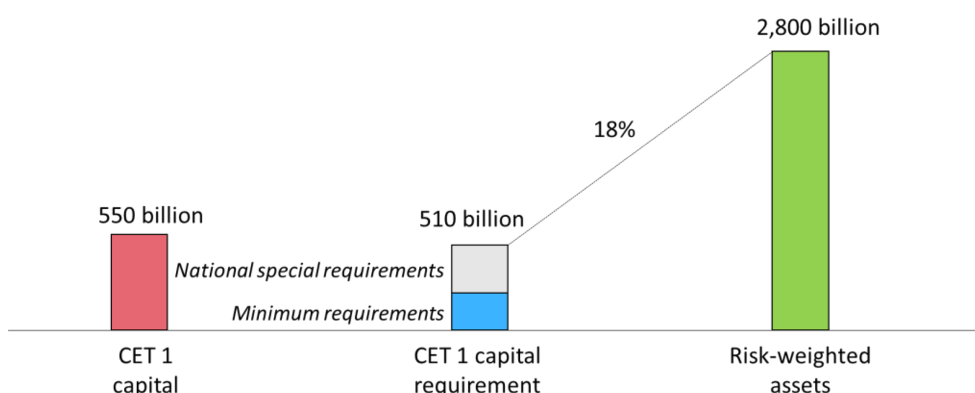
Some of you may wonder why so many different types of capital requirement are necessary and the answer is quite simple: because each individual requirement has its own strength that offsets the weaknesses in the others. Let me give some examples. As I mentioned earlier, a floor for risk weighted assets is needed to prevent the risk weights declining too much. In addition, a leverage ratio requirement is needed to limit the banks' capacity to take on too much debt. If only a leverage ratio requirement were present, this could give the banks an incentive to move to higher

risk assets. To counteract this, we need the current risk-based framework that compensates with a higher capital requirement for higher risk assets.

How much capital do the major Swedish banks have?

Let me now finally discuss what all this may entail for the four major Swedish banks and discuss some of the claims in the debate on the Basel Committee's work. To do this properly, we need to know something about the banks' current capital situation.

Figure 1. Sweden has a large share of national special requirements



Source: Sveriges riksbank

One can describe the major Swedish bank's capital levels in a number of different ways. The banks themselves usually state their CET 1 capital ratios as a percentage of risk-weighted assets. The four major Swedish banks currently have a total of around SEK 2,800 billion in risk-weighted assets. In comparison, their total assets amount to more than SEK 13,000 billion. The risk-weighted assets are largely calculated with the aid of the internal models I mentioned earlier. Finansinspektionen's total CET 1 capital requirement of the major Swedish banks is around 18 per cent of their risk-weighted assets, or around SEK 510 billion. The major Swedish banks currently meet these capital requirements. All in all, they have a CET 1 capital ratio of around 20 per cent of their risk-weighted assets, or SEK 550 billion.

SEK 550 billion may seem a lot, but in relation to the banks' total assets it corresponds to just over 4 per cent. This does mean that the major Swedish banks now meet the future leverage ratio requirement of 3 per cent that I mentioned earlier. However, they all have some way left to reach the leverage ratio requirement of 5 per cent that the Riksbank has recommended Finansinspektionen to introduce.

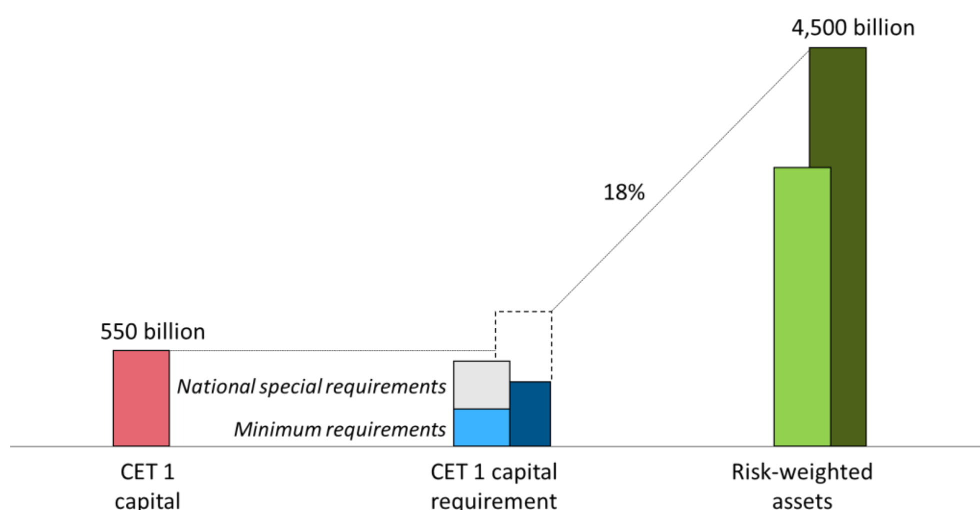
How can a floor for risk-weighted assets change the capital requirements?

The change now being discussed and which will have the greatest impact on the Swedish banks' capital requirements is probably the introduction of a floor for risk-weighted assets (often called a capital floor). To understand how this may affect the major banks' future capital requirements, we need to know that more than half of the SEK 510 billion in CET 1 capital requirement that I mentioned earlier is comprised of so-called special national requirements. This means that Finansinspektionen itself or

in consultation with other Swedish and international authorities has determined that the Swedish banks must meet these requirements. This part is thus the specific national Swedish requirement over and above the requirements the Basel Committee has agreed on. An example of these specific national requirements is the risk-weight floor for Swedish mortgages that Finansinspektionen introduced a few years ago. The capital requirements for major Swedish banks in the form of systemic risk buffers that the Riksbank, the Swedish Ministry of Finance and Finansinspektionen agreed on in November 2011 are also part of these special national requirements.

The other part, slightly less than half of the current CET 1 capital requirement, is the internationally-agreed minimum requirement from the Basel Committee.

Figure 2. Sweden's special requirements need to be reviewed



Source: Sveriges riksbank

Without saying anything about what a future floor for risk-weighted assets may look like, I will simply assume in my example that no bank's risk-weighted assets may be less than 75 per cent of what they would have been if the Basel Committee's standardised methods had been used. I would like to point out that this 75 per cent should not be seen as an indication of any future calibration of a floor for risk-weighted assets. I have chosen this figure because 75 per cent lies between the 60 and 90 per cent that the Basel Committee mentioned in its consultation document in March 2016.[4] Given this assumption, our most recent calculations indicate that the major banks' aggregated risk-weighted assets would increase from the current SEK 2,800 billion to around SEK 4,500 billion.

This would mean an increase in the current risk-weighted assets of more than 50 per cent. If, and I would like to emphasise *if*, Sweden retains its national special requirements in the future, the banks' CET 1 capital requirements will increase by more than 50 per cent, or around SEK 300 billion. This would of course be a significant increase from the current capital requirement levels.

---

[4] See the BIS publication "*Consultative Document -Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches*", http://www.bis.org/bcbs/publ/d362.pdf

Time to start a review of Sweden's special national requirements

Some of the special Swedish requirements have arisen over the years following the financial crisis, as Finansinspektionen and other Swedish authorities have assessed that Swedish banks need more capital than the current minimum requirement supplies. These special Swedish requirements are thus not the result of international agreements. It is therefore reasonable that we should review our current special national requirements when Basel III will be introduced in full in Sweden, especially in the perspective that Basel III will imply higher minimum requirements of the major Swedish banks than before.

Although no decision has yet been made on when Basel III shall be fully implemented in Sweden, my assessment is that we will have plenty of time to review our special national requirements and assess what level they should be at when Basel III is introduced in Sweden. One conclusion of this analysis may be that today's CET 1 capital requirement of 18 per cent of risk-weighted assets for the major Swedish banks in total needs to be changed in future.

Under these circumstances it is too early to make any precise analysis of how, for instance, Swedish GDP will develop or how borrowers' interest rates will be affected by the coming changes in the regulations. The impact that the Basel Committee's Accord has will depend to a great extent on how the major banks' total capital requirements change going forward and how the banks choose to adapt to the new situation. This in turn will be affected by which national special requirements Sweden chooses to have in the future.

One can then ask oneself why it is good that the regulatory framework is amended. An argument in favour of doing this is that the new regulations will become more transparent and that the capital requirements for Swedish and foreign banks will become more comparable. Multiple capital ratios and requirements will lead to a more robust financial system. This is something that benefits financial stability and therefore something I welcome.

The banks determine a respectful distance to the capital requirement

Some may claim that increased minimum requirements will cause the banks' buffers to decline. By the banks' buffers, I mean in this context the difference between the banks' actual capital levels and the capital requirements, or as we sometimes call it; the banks' respectful distance to the capital requirement. If the banks have substantial buffers over and above the requirements, it benefits us all, as it reduces the probability that they will not meet the requirements. However, in the end it is the banks *themselves* that decide what respectful distance to have to the capital requirements. Any changes in the size of the capital requirements do not affect this fact. And my hope is that the banks will act responsibly here.

So to summarise...

I welcome the amendments to the regulations regarding the banks' capital requirements being discussed by the Basel Committee. Even if the final pieces of the

puzzle are not yet in place, the changes will most likely lead to more robust banks and an increased confidence and transparency in the banking system. They will also reduce the risks linked to internal models and lead to increased international harmonisation. This in turn will benefit the major Swedish banks, which compete in a global market. However, it is much too early to say yet exactly how the new regulatory framework will affect the real economy in Sweden. The effects will mainly depend on how Sweden's special national requirements change in the future and not on the Basel Committee’s global minimum standards.

The time is now right to start a review our special Swedish requirements and this is work I welcome and to which the Riksbank would gladly contribute going forward.

Thank you for listening.

SVERIGES RIKSBANK

References

BIS (July 1988), International Convergence of Capital Measurement and Capital Standards

BIS (June 2004), International Convergence of Capital Measurement and Capital Standards, A revised version

BIS (December 2010), Basel III- A global regulatory framework for more resilient banks and banking systems

BIS (March 2016), Consultative Document Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches

Federal Reserve Bank of Minneapolis (November 2016), The Minneapolis Plan To End To Big Too Fail

Finansinspektionen (November 2016), Kapitalkrav för svenska banker kvartal 3, 2016

FSB (October 2014), Key Attributes of Effective Resolution Regimes for Financial Institutions

Goodhart, Charles (2011), The Basel Committee on Banking Supervision, A history of the early years 1974-1997

IMF (October 2013), Global Financial Stability Report

IMF (August 2014), Article IV Consultation – Staff Report, IMF Country Report No. 14/261

Riksbanken (December 2016), Financial Stability Report 2016:2