

Nils Bernstein: Globalisation, the Danish economy and Danish agriculture

Speech by Mr Nils Bernstein, Governor of the National Bank of Denmark, at the Annual Meeting and Congress of Danish Pig Production, Herning, 30 October 2007.

Basis for the speech. The spoken version applies.

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Thank you for the invitation to speak here today.

I would like to start with globalisation. This will be followed by a snapshot of the Danish economy, and an account of why Denmark is doing relatively well in an increasingly globalised world. Finally, I will turn to Danish agriculture, primarily pig production.

Globalisation is a dynamic process whereby the global markets for goods, services, capital, labour, technology, knowledge and ideas are being liberalised and integrated. Globalisation opens up new possibilities and strengthens global competition, while productivity is enhanced via a better and more efficient distribution of the factors of production. Consequently, globalisation does not only lead to new trade flows. It also means that production moves to the places that offer the best conditions for producing the relevant goods or services.

It is important to understand that globalisation is not a zero-sum game where we just share the existing production opportunities. If each country produces what it is relatively best at, overall output, and thus real income, increases, compared with a situation where all countries try to be self-sufficient.

In the transition process there will always be people who lose their jobs or companies. Not surprisingly, they are against these changes. But the sooner they realise that they would be better off doing something else, the sooner they can reap the benefits of specialisation.

The best safeguard against the changes brought on by globalisation is to acquire training and skills to avoid getting stuck in an unprofitable job function.

Society as a whole benefits from being able to buy the same goods elsewhere at a lower price, and naturally society should therefore facilitate the adaptation process – by promoting education, supplementary training, the establishment of new companies, etc. These relatively simple mechanisms have been acknowledged for a long time, and since World War II trade restrictions have indeed been phased out, some more rapidly than others.

It is no secret that agriculture is among the sectors where the pace of liberalisation has been slowest, in spite of the large potential gains from phasing out agricultural subsidies and the rich countries accepting that much food production is relocated to less affluent countries. There are many reasons for this sluggishness – but they are outside the scope of this speech. I am pleased to note that Danish agriculture supports a controlled phasing-out of agricultural subsidies. As we know, agriculture is one of the major hurdles to be overcome in the current Doha negotiations. To me there is no doubt that liberalisation will come some day. It is simply a question of when.

Globalisation is not a new phenomenon; in Denmark's case it has been going on for about a century – albeit with some setbacks (*slide 1*). This period has been characterised by major technological advances, e.g. within transport and communication. As you will know, cheap transport via the new railways opened up for exports of wheat from the US prairie in the latter half of the 19th century. This called for restructuring of Danish agricultural production from mainly crops to mainly livestock. Danish agriculture was able to exploit the opportunities offered by globalisation, and C.F. Tietgen's establishment of a telegraph connection from Copenhagen to China was part of a clear globalisation strategy.

Following a period of protectionism, the last half century has been characterised by an international political environment that has promoted free trade, and free movement of capital and – to a lesser extent – people. Growing international trade and investments are indications of increasing international division of work. Low-technology production moves to countries whose strength is inexpensive labour. In turn, production in more developed countries becomes increasingly concentrated on high-technology products and complex services.

In the last few years, globalisation seems to have gained further momentum as populous nations such as China and India are increasingly becoming part of the global market economy. Once again, technological leaps within transport and communication have been the catalysts for the process.

International integration is particularly advanced in the financial markets, and the last decade has seen a tremendous rate of development (*slide 2*). The conditions for free movement of capital are probably better than ever. Liberalisation of the international financial markets over the last few decades has enabled more efficient employment of capital from a global point of view. Savings are placed where the largest returns can be achieved, and borrowers can raise capital from a wider range of investors. For investors, more open financial markets mean more placement opportunities.

Typically, investments in foreign production capacity are still placed in neighbouring countries. The shares of Danish direct investments in countries such as China and India are increasing, but still at a low level overall. This also applies to Eastern Europe, actually.

The many borrowing and placement opportunities can be used to increase, reduce or spread financial risks. This is generally an advantage, but also involves risks, as the current subprime crisis illustrates. This began as an isolated phenomenon on the US housing market, where the low level of interest rates made it attractive to offer loans to less creditworthy homeowners. Many of the loans were "teaser loans", i.e. loans where the rate of interest is artificially low for the first 2-3 years and then raised to the normal level for borrowers in this category.

When interest rates began to normalise, many borrowers were unable to service the loans at the new, higher rate, and since housing prices were falling at the same time, losses were incurred on these mortgages. The losses soon proved to be spread on many different investors, including a number of European banks that had purchased bonds with top ratings based on "restructured" subprime mortgages.

In addition to the risk of loss, some banks had taken on considerable liquidity risk by issuing guarantees to investment firms investing in credit bonds, among other things. In several cases, these guarantees were exercised. This led the banks to exert greater restraint in lending to other banks as they might need the liquidity themselves. In the UK, the lack of borrowing opportunities in the money markets led to the first run on a bank, Northern Rock, for more than 100 years.

The authorities have been compelled to provide extraordinary guarantees to the depositors.

Danish investors are only to a very limited extent directly involved in subprime investments, but may be hit by derived effects. The course of events shows that globalisation also entails less protection against ill-fated external dispositions.

Right now there is believed to be a growing risk that the slowdown in the US housing market will spread to the rest of the US economy. If this happens, the rest of the world will also be adversely affected.

For some time, the dollar has been depreciating vis-à-vis the euro. This is basically a natural reaction to interest-rate expectations in Europe and the USA. In view of the large current-account deficit in the USA and the corresponding surplus in e.g. China, the Chinese currency would be expected to appreciate against the dollar. However, this effect has been postponed

due to massive Chinese intervention in the foreign-exchange market to keep the renminbi stable against the dollar. Consequently, the euro has also strengthened vis-à-vis the renminbi and the yen.

There are many speculations as to whether the dollar will fall further against the euro – and thus the krone. I will not venture any opinion on this. Exchange-rate forecasts are notoriously unreliable.

At present, the US annual current-account deficit is around 6 per cent of GDP, which is not sustainable over a prolonged period. At some point an adjustment process is required, involving not only the exchange rate. This process has already set in. We must keep our fingers crossed for a gradual process, for if the adjustment is too abrupt, it may have significant negative consequences for the global economy.

Now I would like to turn to the Danish economy, which is booming with high growth and rapidly rising employment. Private-sector employment has increased strongly since 2005 and unemployment is at the lowest level for 30 years. At the same time, the government surplus was around 4 per cent of GDP in 2006 and will presumably also be among the highest in the industrialised world this year.

There are, however, several indications that the economy has reached its capacity limit. The shortage of labour, combined with rising interest rates, will dampen growth. The current-account surplus is receding. This reflects the fact that demand must increasingly be met via imports because domestic output cannot keep up with demand. On the other hand, the prospects for many of Denmark's key export markets are good. This means that, capacity allowing, the sales opportunities are there. Denmark has been leading the economic cycle compared to the rest of Europe, and the economies of Germany and several other euro area member states have only recently begun to take off.

As a result of the capacity pressures, Danish prices and wages have begun to show an upward trend. The collective agreements concluded for parts of the private labour market in the spring thus point to a substantially higher rate of wage increase than in the preceding agreement period. Now the collective bargaining for the public sector is approaching, and very high wage expectations among large groups of public-sector employees point to tough negotiations.

Wage developments contribute to a stronger domestic price pressure, which is set to intensify further. So far, low import price increases, due to e.g. the weakening of the dollar, have kept inflation below 2 per cent p.a. However, wages are undoubtedly the one single factor that could potentially derail the economy. History shows that a high rate of nominal wage increase is by no means synonymous with higher real wages, i.e. higher purchasing power (*slide 3*).

Against this background, Danmarks Nationalbank has recommended fiscal policy that is not expansionary. After all, we want to maintain our favourable economy.

One of the main reasons why the Danish economy has been relatively sound in recent years is that we have created favourable framework conditions for the economy – even better conditions than many of our European partners offer. Let me highlight a few important areas.

Traditionally, Denmark has adhered to liberal industrial policies and no political measures have been taken to artificially keep struggling sectors and individual business enterprises alive. Restructuring has been permitted to take its course, which means that resources have been moved from areas with little added value to industries with high added value, to the benefit of the overall economy.

This process has been underpinned by a flexible labour market which supports such restructuring instead of impeding it. The Danish labour-market model, referred to as "flexicurity", is well-known even outside Denmark's borders. Flexicurity combines liberal access to hiring and firing employees with a social safety net and active labour-market

policies. The dynamics of the Danish labour market are e.g. reflected in a very large number of job shifts – approximately 600,000 a year. Consequently the average employment in the same job is just 4.8 years, which is very low by international standards.

In the last 10 years, fiscal policy in Denmark has been based on a "medium-term orientation", whereby not only current, but also future expenditure is taken into account. This is a sound principle. Government finances are very sensitive to economic trends, oil prices and fluctuations in interest rates and securities prices in the financial markets. For this reason, among others, it is not appropriate to plan fiscal policy on the basis of the government budget balance in any single year. The large surpluses seen these years are of a temporary nature and will decline in the future, partly on account of population ageing. The surplus does not mean that there is scope for unfunded tax reductions or lasting improvements of public-sector services.

The final framework condition for the economy that I would like to emphasise is the fixed-exchange-rate policy. This policy has been a tremendous success, and I doubt if anyone would question it today. Maintaining a fixed exchange rate against the D-mark, and since 1999 the euro, has anchored inflation expectations at a level close to 2 per cent p.a., and in recent years the yield spread to Germany has been negative at times.

Success in the global economy is not merely a question of economic policy in a narrow sense, and nor is it purely a question of wage competitiveness. In recent years other issues have increasingly come into focus. These include the importance of a sound institutional framework, e.g. an efficient public sector, suitable business regulations, infrastructure, non-corruption and more intangible concepts such as "social capital", a measure of whether people basically trust each other and the authorities.

Numerous efforts are being made to capture all these factors in one single weighted measure of a country's competitiveness. Typically Denmark performs well in such surveys. In a global index prepared by the World Economic Forum, Denmark came 4th overall in 2006 (*slide 4*). And in fact, The Economist's recent survey of the countries with the best framework for operating a business put Denmark in 1st place. In other words, a small country with a large public sector and thus a high tax burden can actually perform well in international competition. It is worth noting that the top performers on the list include both small and large countries, and countries with both large and small public sectors.

The pharmaceutical industry is one of several Danish success stories. In volume terms, production and exports of medicine have more than doubled over the last 10 years. As if that was not enough, sales prices in the export markets have risen by approximately 40 per cent in the same period (*slide 5*).

Another example is the textile industry, which at one time employed a very large number of people, particularly in Jutland. Today, most low-wage jobs in the textile industry have been relocated to countries with lower hourly wages than Denmark, but over the last decade export volumes have risen at almost the same rate as medicine exports. This shows that Danish textile production has moved further up the value chain. The remaining Danish labour is engaged in design, marketing, branding, etc., which are areas with high added value.

An export-oriented economy such as Denmark's has benefited from the general increase in international trade. Unlike many other industrialised countries, Denmark has also benefited from better overall terms of trade (*slide 6*). This also applies if energy is excluded. Not only the pharmaceutical companies, but also a wide range of other Danish enterprises have been able to sell their products at still higher prices, while the prices of Danish imports have stagnated or even fallen. Often imported goods are manufactured in low-wage countries, which keeps prices at bay. Improved terms of trade contribute to Danish affluence just as higher production does since both boost real incomes.

Agricultural production is not part of the explanation for the improved terms of trade. In this sector, prices have been stagnant or even receding, and in many cases the prices of

agricultural products fluctuate strongly. As you all know, this is certainly true of the price of pork (*slide 7*).

In a global perspective, pig farmers are currently faced with strong increases in feed prices, partly reflecting more extensive international use of feed for bioethanol production. In the longer term, higher feed prices can be expected to pass through to pork prices, but in the short term contribution margins will be squeezed. Looking ahead, the development may give Denmark a competitive edge, since I understand that Danish pig farmers are close to holding the world record for transforming feed units into pork.

The upward pressure on feed prices may intensify further if China, which is by far the world's largest pig producer, abandons its self-reliance strategy and opens up its market for imports of grain and feed. In general, the development in less industrialised countries will gain importance in relation to the future development in pork prices. Today, industrialised countries account for only around 1/3 of global production of and demand for pork, and their share is falling.

In the longer term, population growth and rapidly rising incomes, and thus meat consumption per capita, in the low- and middle-income countries will buoy up pork prices, although production is also increasing in these countries.

The OECD, and the UN Food and Agriculture Organization, FAO, have projected food prices over the next 7-8 years. The OECD/FAO expect the price of pork to rise slightly to somewhere in the range of kr. 9.5-10 per kg. These are current prices, which means that in actual fact pork prices will continue to fall.

Such projections are, of course, subject to considerable uncertainty, and particularly in the short term they can be affected by exchange-rate fluctuations, diseases, weather conditions, etc., and likewise changes in agricultural policy and trade restrictions may have an impact. Nevertheless, the projection serves as a key indicator for pig farmers. If the expected price level cannot provide a satisfactory profit, the farmer will eventually be squeezed out of the market.

On a global scale, Danish pig farmers produce 2 per cent of all pork, but account for almost 13 per cent of exports. It may seem surprising that Denmark, which has one of the highest wage levels in the world, has been able to maintain and strengthen its position as one of the world's largest exporters of pork in a fully commercial international market.

The explanation is that pig farmers have been able to increase productivity at an astounding pace. For many years, productivity has been far higher in agriculture than in the rest of the economy, including the industrial sector (*slide 8*).

Paradoxically, however, the individual farmer has gained very little from the increase in productivity since fierce competition means that most of it is immediately passed on to consumers via lower food prices. The situation resembles that of a hamster in a treadmill: it runs and runs, but never gets anywhere. But if it stops running, it is slung out.

According to accounts statistics for pig farmers, the "profit per hour" has been just under kr. 50 over the last five years, i.e. only half the minimum wage in the industrial sector. The profit per hour reflects the farmer's hourly income after deduction of costs and return on capital employed. According to the accounts statistics, income generation in pig farming is thus lagging behind many other sectors. However, there are considerable differences within the sector.

Statistical extracts show that the average profit per hour for the third of farms that in 2005 exceeded the kr. 50 threshold was kr. 140, while the rest averaged kr. 40 (*slide 9*). 2/3 of the farms had a negative profit per hour. The most profitable third of the farms produced 60 per cent of the pigs. The figures speak for themselves about the advantages of economies of scale. Moreover, there is a tendency for the farms that produce their own piglets to achieve the best profits.

One third of all farms, accounting for just under 25 per cent of production, have a negative profit per hour combined with high debts. How long can they last, I wonder. The structural development will continue. Others will take over and form larger units. This will be necessary if the Danish pig-farming sector is to remain competitive.

You might safely say that Danish agriculture has embraced the opportunities in the liberalised capital markets. Indebtedness has risen substantially over the years, particularly in the period when interest rates were falling. Lower debt-servicing costs have not led to consolidation, but to higher indebtedness.

Farmers are among the most frequent customers for adjustable-rate and deferred-amortisation loans. In addition, a large part of the debt is denominated in foreign exchange. For some years, the Swiss franc has been a popular currency for Danish farmers to borrow in (*slide 10*). Whereas other sectors often seek to hedge foreign-exchange risks, many farmers take on such risks on a large scale. But this is not the whole issue. In some cases, foreign-exchange loans are not used to finance operations, but are invested in high-yield currencies. This is a purely financial transaction that is unrelated to running a farm.

For a number of years it has indeed been possible to profit from these "carry trades", whereby money is borrowed in a low-yield currency such as the Swiss franc or the yen and invested in a high-yield currency such as the Turkish lira, the Icelandic krona or the New Zealand dollar. However, such transactions always entail considerable risk, and much is to be said for exercising caution, even in favourable periods. Exchange-rate adjustments can be abrupt and substantial. The question is whether everyone has been sufficiently aware of these risks when chasing "cheap money". In any case, if a farm primarily yields a profit as a result of purely financial transactions, it is, perhaps, time for the farmer to find other employment. The banks are short of staff!

The future for Danish pig farming will be a continued elimination race in which only the fittest will survive. In addition to external competition and sustained price pressures, environmental and animal welfare regulations are becoming stricter. The pig-farming sector will have to accept this, even if the requirements sometimes exceed those imposed on foreign competitors.

As you already know, it will be increasingly difficult to attract Danish labour to the farms. Around one fourth of all work permits for people from Eastern Europe are exercised within agriculture and horticulture.

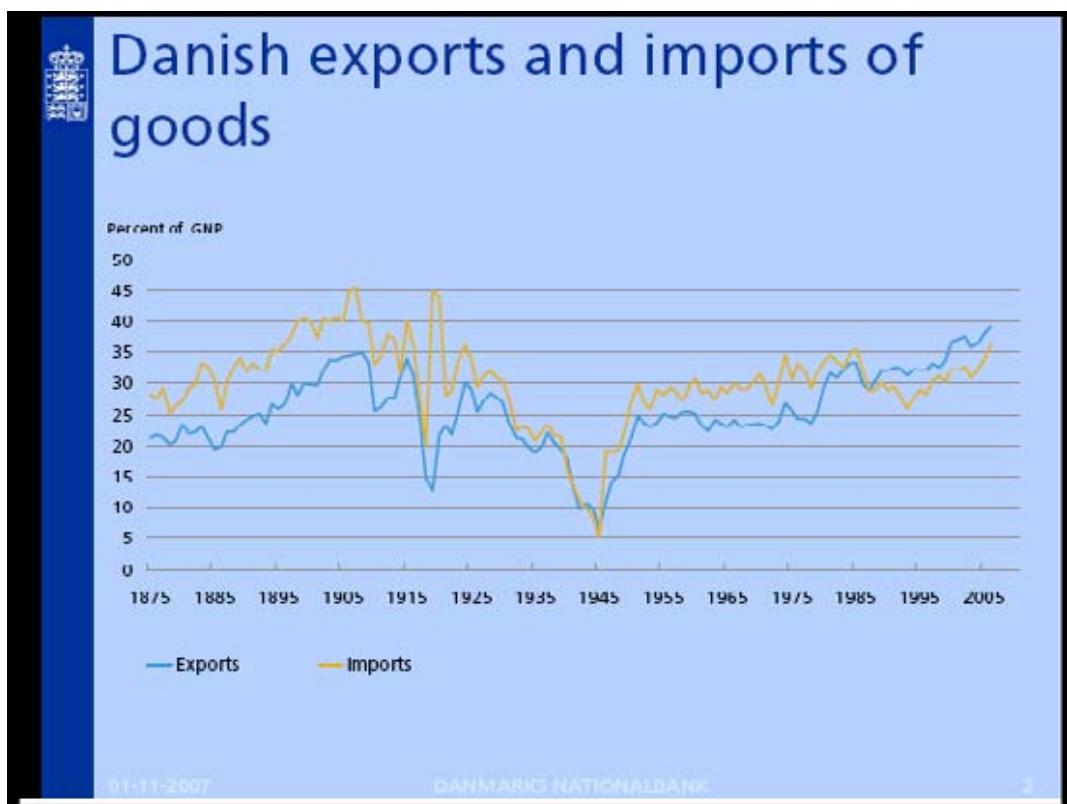
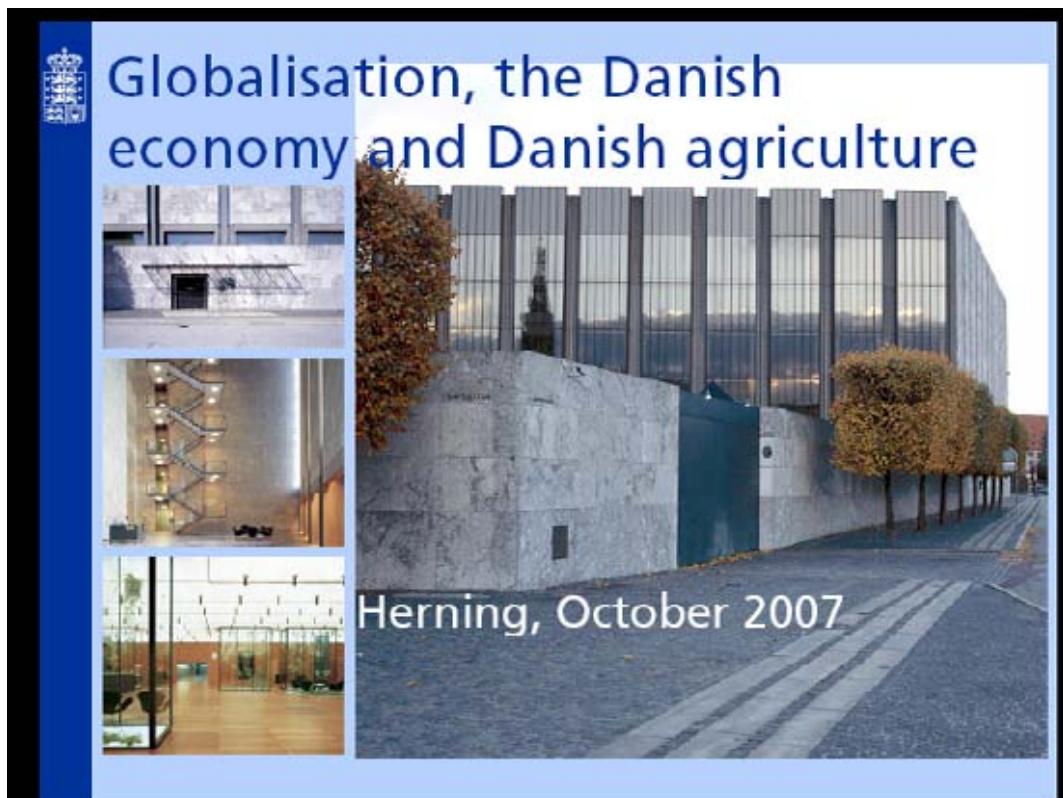
Pig production can have a serious adverse impact on the environment and in many cases also on the local environment – it smells. With more than two pigs per capita, Denmark has a high pig density. In some parts of the country, the figure is much higher, and the problems much greater, than elsewhere. At the same time, the public are very sensitive to animal welfare issues, as reflected in the recent years' cases of pig transports and shoulder ulcers in sows. These issues must be addressed by the sector.

Unless the environmental and animal-welfare issues are resolved, the restraints on pig farmers will become even tighter, and it will be increasingly difficult to continue to expand production as in the last decades.

Some take the consequences and invest in places like Poland and Ukraine. This is globalisation in the true sense of the word and offers good growth opportunities.

With the initiative and enterprising spirit that characterises Danish agriculture, and particularly the strong technological foundations that the pig-farming and processing industry rest on, I have no doubt that pigs will also be farmed and slaughtered in Denmark in the coming years. However, you will probably need a smaller and smaller venue.

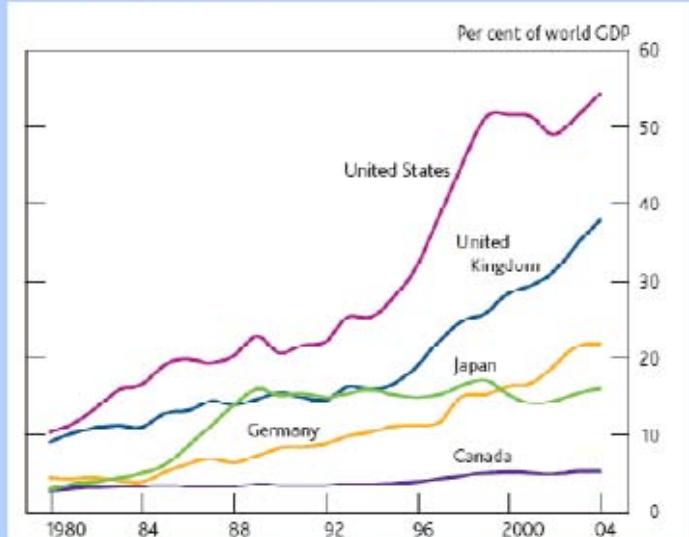
I wish you a good congress.





Financial integration

Total holdings of foreign assets and liabilities in per cent of world GDP



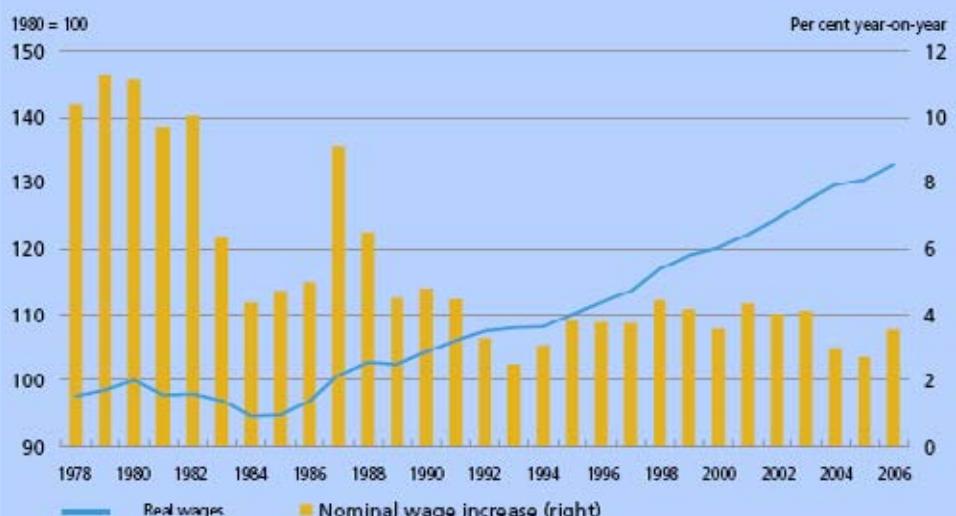
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3



High nominal wage increase, low real wage increase



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4

Competitiveness in a broad sense

World Economic Forum (2006)

Switzerland	1
Finland	2
Sweden	3
Denmark	4
Singapore	5
USA	6
Japan	7
Germany	8
Netherlands	9
UK	10
Hong Kong	11
Norway	12
Canada	16
India	43
China	54

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5

Export volumes and prices



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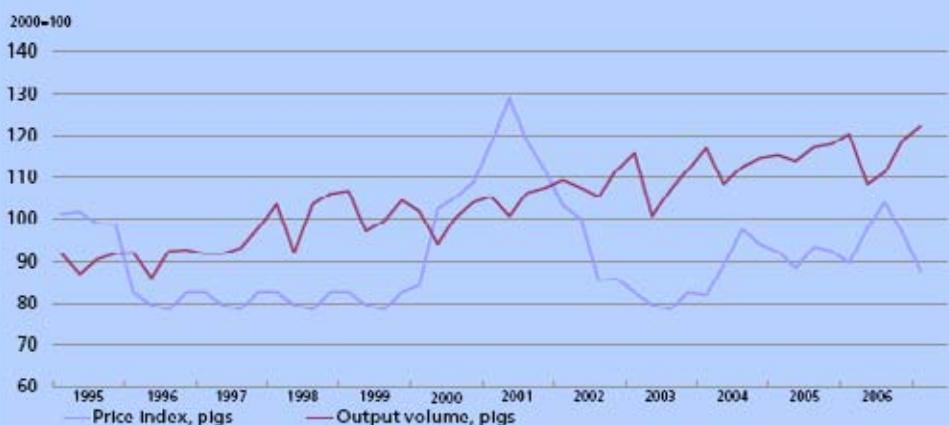
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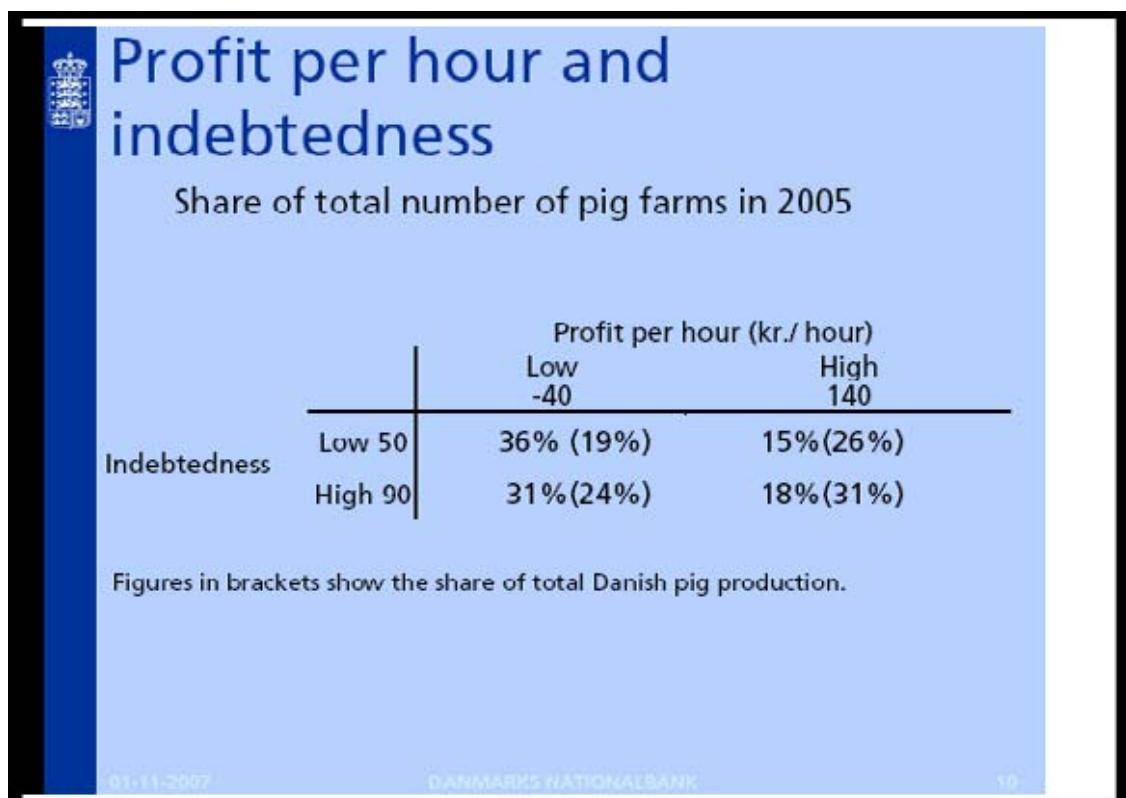
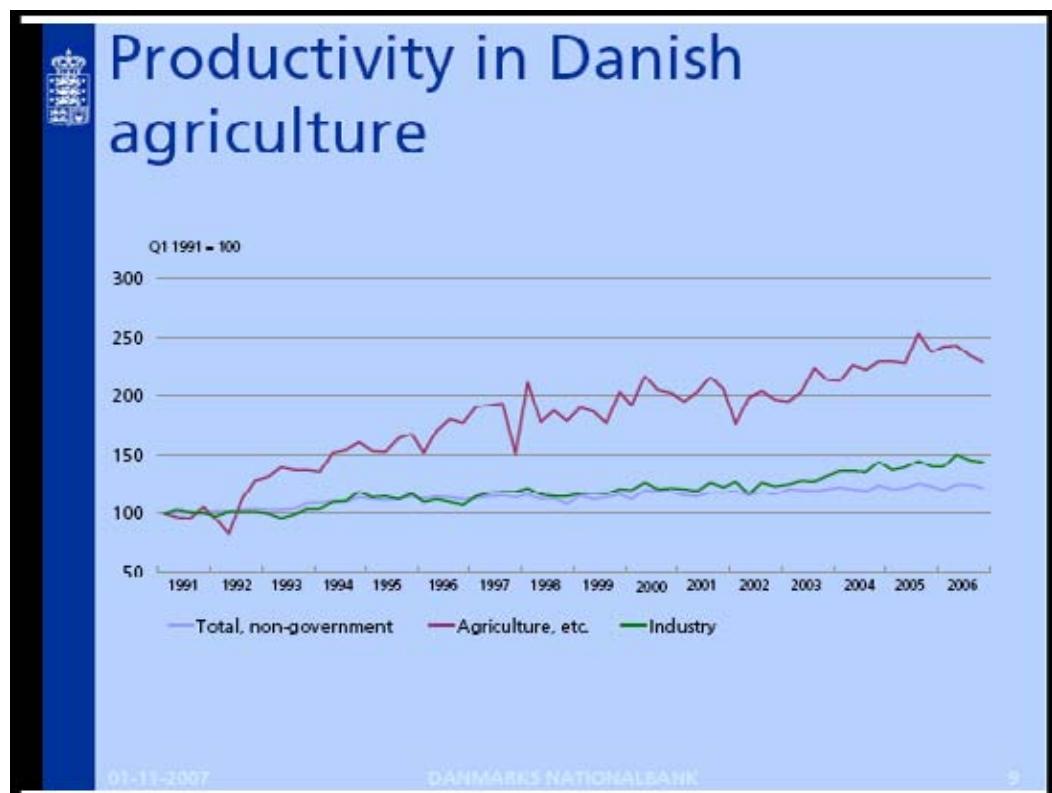
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Relationship between export and import prices



Danish pork production and price







Loans in Swiss francs

Kr. billion

25

20

15

10

5

0

2001

2002

2003

2004

2005

2006

Lending in Swiss franc by banks to households

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11