

Waging war

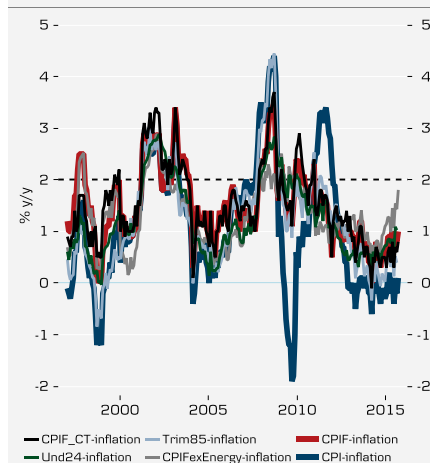
Riksbank fighting on two fronts: Inflation and competitiveness

- **The centralised wage negotiation rounds to be concluded in spring 2016 has begun.** Thus far, most of the work is internal within trade unions and employers' organisations, but some external posturing has undoubtedly started, in our view, with the main arguments being chiselled out in public debates and media.
- **From a Riksbank perspective the upcoming negotiations will prove decisive.** First and foremost, the Riksbank would like to see relatively high wage agreements, which are necessary to attain the inflation target. However, the Riksbank must also take into account that high wage agreements would further erode competitiveness in the exports industry. Too-high wage agreements would hinder stronger productivity and overall GDP-growth from normalising the profit share and – in the longer term – to sustainably create conditions for higher wage growth.
- **Our view is that the wage negotiations run a clear risk of coming in lower** than previous wage rounds, and that the trend towards low wage drift will continue. In short, this means that total wage growth might very well end up almost one percentage point lower than the Riksbank currently forecasts (*i.e.* around 2½% y/y). We would prefer even lower agreements, in order to bring back swiftly the profit share of GDP to the historical average. However, very low wage agreements also normally come at a cost to the employer: Short duration. – This would pose another restriction for the Riksbank.
- Historically, about half of wage inflation is carried through into inflation implying that actual **inflation might very well end up half a percentage below the Riksbank's current forecast.**
- **Continued undershooting of the inflation target must not, and in our view, will not be taken lightly by the Riksbank,** desperate to re-anchor wage formation to the inflation target. Hence, we also expect further monetary policy measures, consisting mainly of an additional repo rate cut. Such a scenario, with monetary policy reacting to a lower inflation, would be further strengthened by an agreement with short duration, forcing the Riksbank to continue to boost inflation expectations.
- **FX interventions,** we argue, do not only provide a viable policy option, but are – albeit mainly from a domestic perspective – a more exact tool for addressing current competing monetary policy issues.

Today's key points

- The preparations for the centralised wage agreements made during spring is in full swing.
- We expect them to result in too-low wage growth and, hence, too-low inflation.
- The Riksbank is sure to react in our view, at first through pushing the repo rate further into negative territory and by performing additional QE.
- FX interventions remain – especially from a domestic perspective – a more exact tool

Inflation always and everywhere below target



Statistics Sweden. Danske Bank Markets' calculations

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Wage formation in Sweden

For decades (since 1905), centralized wage negotiations have been a defining trait of the Swedish labour market. More recently, the centralised wage formation process has been based on a normative industrial target (the first normative industrial agreement was struck in 1997). This adjustment to the centralised wage formation process has generally been regarded a success, as more moderate nominal wage hikes have led inflation lower and opened up strong real wage growth and consumption.

The two main pillars are the acceptance of all social partners that negotiations start off with the wage agreement of the internationally competitive exports industry, and the wage formation process is the sole responsibility of employees and employers (no government interference).

In total (centrally and locally negotiated) there are some 685 different agreements spanning three and a half million workers. In 2016, 500 of these agreements will be renegotiated, affecting approximately three million workers directly. Through so called local collective agreements and agreements with cancellation clauses, most of the other 185 agreements and most of the remaining one and a half million workers are, at least indirectly, affected by the upcoming wage negotiations. Plainly, in one way or the other, the wage negotiations reach into all parts of the Swedish labour market and affect all workers, all self-employed and all employers.

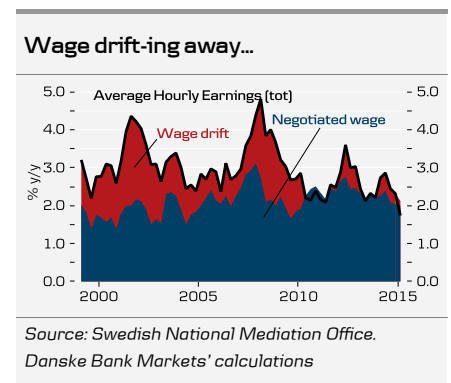
Figureless agreements

Around one-third of the wage agreements are “figureless”, *i.e.*, the agreement leaves it to *local* partners to negotiate wage growth and other benefits etc. This share has increased dramatically from the first one struck back in 1992 (between *Almega* and *Ledarna*) to 222 today. The prevalence of figureless agreements is set to increase further as many of the social partners see it as a way to free themselves from the shackles of the normative industrial agreement. It goes without saying that the increasing number of figureless agreements pose a potential threat to the established wage setting model where the industrial wage agreement is expected to serve as a norm for other agreements to follow, aligning economy-wide wage inflation, somewhat rigidly, to developments in the goods industries.

Furthermore, the result of figureless, local, agreements are wholly counted as “wage drift”, which over the years has become a misnomer and is more aptly labelled as a “wage residual”. What’s more, the wage residual does not have the same cyclical properties as wage drift, and it is considerably less correlated to economic developments. The only discernible pattern is the apparent downward trend in the wage residual as the number of figureless agreements has increased.

The main issues within the current wage formation model

From a labour market perspective, there are two basic problems that the wage formation process has to resolve: (1) The size of total (average) wage growth, and; (2) Relative wages (within and between different groups on the Swedish labour market). **Below, we will concentrate mainly on total wage growth and its implications for inflation and Riksbank monetary policy** and only address relative wages in so far they affect the monetary policy outlook.



As noted above the industrial wage agreement serves as a “norm”, for other agreements to follow. The theoretical underpinnings behind this particular setup are not clear-cut (*see the NIER report Wage Formation in Sweden 2012*), but it is a simple and accepted framework that – most importantly – has led to a stable and relatively smoothly-functioning wage formation process. The main problem with this particular model is often thought to be that it fails to satisfactorily incorporate sectoral differences in productivity and (related) structural transitions to, e.g., a more services based economy and exports sector or other internal developments that warrant a (big enough) change in the *real* exchange rate and/or current account.

Nominally, at least, the normative agreement among employers and employees in the industrial sectors *does leave room for relative wage adjustments* and a possibility of taking into account (smooth) structural transitions (productivity differences etc) within the economy. At least as long as industrial and related sectors – incl., e.g. services related to goods production (software, installation, upgrade, maintenance etc) – constitute the lion’s share of Swedish exports¹. Under the current model, a deviation from the industrial norm can take place *if* there is: (1) consensus among employers and employees (no force of conflict); (2) widespread acceptance for a deviation among other labour market participants, and; (3) a long-term planned process to address relative wage problems of various kinds (gender, heritage, etc).

In reality, deviations from the norm are a considerably more difficult and delicate matter, to which, *inter alia*, the rapidly increasing number of figureless agreements and recurring public debates between different labour market sectors are testament.

Concluding the discussion on the current wage formation model it is, nonetheless, important to appreciate that in the absence of (large) structural shocks it, arguably, quite closely resembles the theoretical wage formation model for a small open economy.

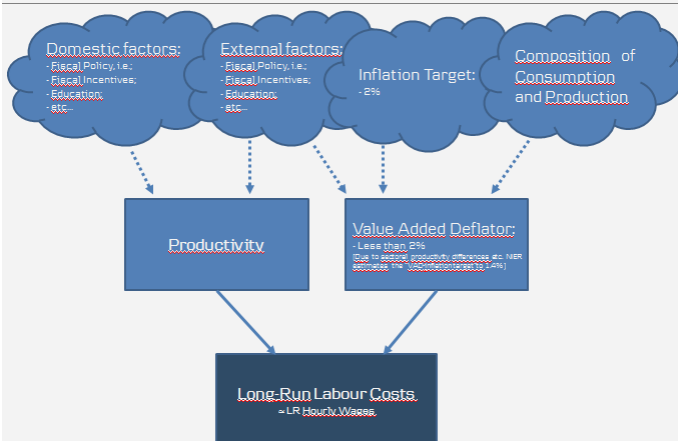
The preferred model of wage formation

A theoretically consistent – stylized – model for calculating wage space in a small open economy may help to shed some light on how wage formation ideally would be constructed, and also provide a good starting point for our discussion on what factors are important for total wage growth and how we reach our estimate of wage space. Please note, in analytical models, the term Total Labour Costs is often used as it also incorporates benefits and other non-salary changes. In this report we use the terms labour costs and (hourly) wages interchangeably, if not otherwise specified. In the following, we will briefly highlight the main pillars in such a model and lift out a couple of interdependencies and fallacies that are important for our conclusions from an inflation and Riksbank perspective.

Forecasts on *nominal* wage inflation, when the economy is in a state of cyclical balance (*i.e.*, in the long run), are decided by productivity and the inflation target alone. To be sure, in this report and – importantly – in the actual wage formation process, other considerations are of course also significant. Hence, the stylized model of long run labour costs needs to be supplemented by views of cyclical deviations from long run equilibria, and also by the ambitions of the social partners to push the equilibrium unemployment rate down. *NB*, in this report we will assume that the social partners’ targeted UNR is unchanged.

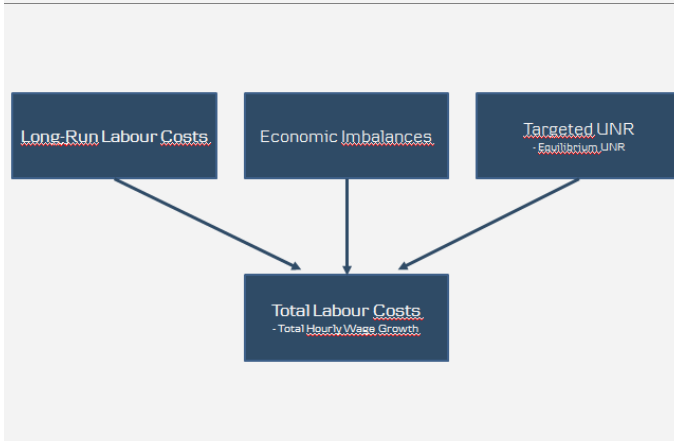
¹ Recently, the social partners presented a report confirming the strong interaction between sales of goods and its spin-off services: <http://www.teknikforetagen.se/globalassets/i-debatten/publikationer/ekonomisk-analys/en-rattvisare-bild-av-industrin.pdf>

A Long-Run Framework (LRF) for deciding labour costs...



Source: Adapted and modified from Riksbank, Swedish Mediation Office and National Institute for Economic Research publications

...and a Short-Run Framework (SRF)!



Source: Adapted and modified from Riksbank, Swedish Mediation Office and National Institute for Economic Research publications

Wage growth in 2016 and beyond

Below, we will use the stylized long-run (LRF) and short-run (SRF) frameworks depicted above to outline Danske Bank Markets’ view on the upcoming wage negotiation round. In particular, we will focus on the structural labour costs and the economic imbalances.

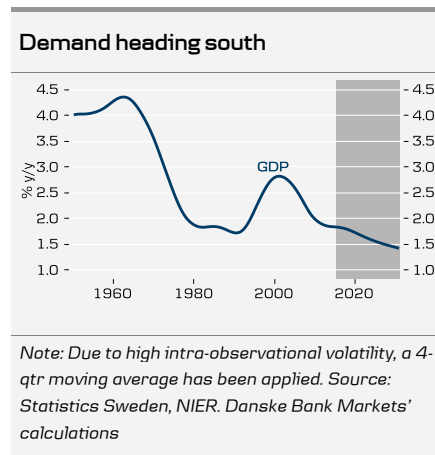
Arguing for long-run labour costs below competing estimates

According to the “Long-Run Framework”, when weighing long-run labour costs there are two factors that need to be estimated: (1) long-run productivity growth, and; (2) the long-run value added deflator (VAD) congruent with the inflation target. Here, we will focus on long run productivity assuming the NIER’s estimate on a long-run VAD of 1.4% y/y to be correct.²

For a number of years, even prior to the Global Financial Crisis (GFC), Danske Bank Markets has repeatedly warned for large (negative) structural changes of the Swedish economy pertaining, *inter alia*, to demographics. In the wake of the GFC, and as more data has become available and econometric models (thus) easier to calibrate, we have searched for a method of calculating potential estimates that: (1) incorporate our long-held view of strong demographic effects; and (2) do not suffer from many of the shortcomings of the models employed before the crisis and which failed to, ex-ante, identify the shift in potential trends.

To achieve this, we have used a remarkably simple and appealing method recently developed by Robert Gordon of Northwestern University (for details, *confer*, *NBER WP 20423*), which uses a basic output identity and a multivariate Kalman-filter to discern underlying trends in data. Admittedly, some important assumptions on future demographics, fiscal measures etc. are necessary, but we believe that this is a small price to pay for the unrivalled transparency of Gordon’s method. In short, the calculations imply potential productivity growth of a mere 1.25% y/y, with hours worked increasing about 0.25% y/y, resulting in a potential GDP-growth of approximately 1.25% y/y.

To calculate long run labour costs – by how much labour costs can grow when the Swedish economy is in cyclical balance – we simply add the productivity growth estimate



² Since the long-run VAD is dependent, *inter alia*, on differences in long-run sectoral productivity, our estimate of a lower overall productivity growth could of course imply a differential impact on sectoral productivity, but

to the NIER:s estimate of VAD-inflation and, hence, reach 2.75% y/y. Indeed, this is low compared to most other estimates of long-run wage space; the NIER, *e.g.* indicates that this number is around 3.5% y/y, which is probably where “conventional wisdom” would put it as well.

Total Labour Costs in the past, the present and a very distant future (% y/y)

Period	Productivity	VAD	Total Labour Costs
1980-1996	1.5	5.7	7.0
1996-2004	4.2	0.7	4.9
2004-2015	1.1	1.4	2.7
Long-Run	1.3	1.4	2.7

Note: Numbers not completely comparable due to a differential inclusion of 1-2 family dwellings and leisure house industry.

Source: Statistics Sweden, OECD, NIER, Macrobond Financial. Danske Bank Markets calculations

Considering that average *negotiated* wages since the inception of the normative industrial wage agreement has been rather stable near 2.5% y/y, the scope for a clear, positive wage residual (“wage drift”) diminishes dramatically with our estimate, and in order to preserve some leeway for necessary relative wage changes it becomes paramount that negotiated wages come down or that deviations from the industrial norm are facilitated.

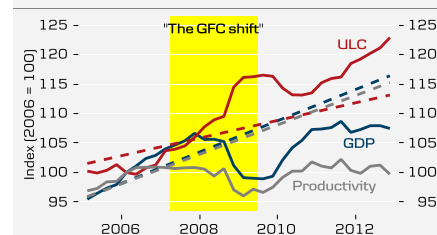
Now, with sustainable wage growth no higher than 2.75% y/y, do current *economic imbalances* add or subtract wage space in the upcoming wage negotiations?

A short retrospect of wage growth before, during and after the crisis

In order to respond, we think it is important to first put the upcoming wage negotiations into their rather distinct historical context.

Back in 2007, on the eve of the financial crisis, employers and employees struck an agreement running over three years and which resulted in negotiated wage growth of circa 3% y/y per year (on average). Shortly thereafter, when the GFC struck, employers and employees (mainly in the industry) agreed to temporary cut backs in hours worked but holding hourly wages more or less constant, under the implicit assumption that growth and demand for labour would soon normalize, *i.e.* return to trend. As a result, while demand (GDP) plummeted, hours worked stayed high due to hoarding and (negotiated) hourly wage growth stayed high. In other terms, productivity growth tanked and unit labour costs (ULC) shot up, both in absolute and in relative terms.

In levels: GDP, productivity and ULC



Source: Statistics Sweden, NIER. Danske Bank Markets' calculations

At the same time, and in response, monetary and fiscal policy was expanded dramatically in both Sweden and its export markets and demand did indeed return rapidly in the wake of the crisis. The hoarding strategy – or bridge policies, if you will – thus seemed to pay off. In 2010/11, Swedish production could and did respond quickly to the increased global and domestic demand and GDP-growth peaked at 8% y/y, productivity peaked at 4.5% y/y and, thanks to a short but low wage agreement in 2010 (around 1.75% y/y), ULC fell back, at least in absolute terms.

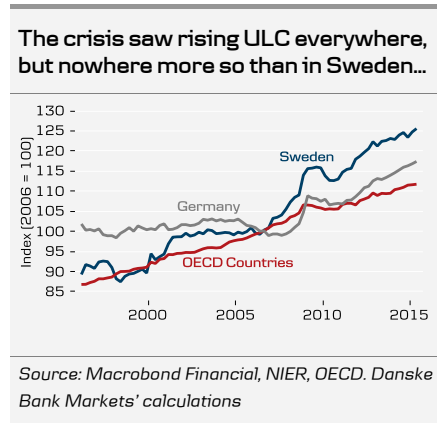
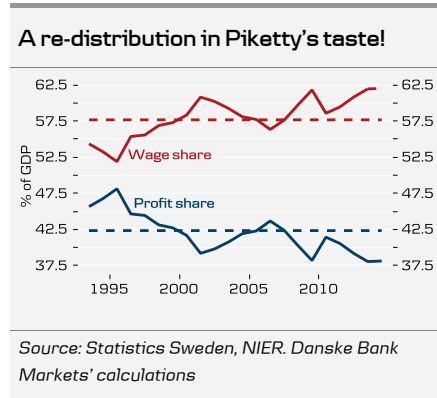
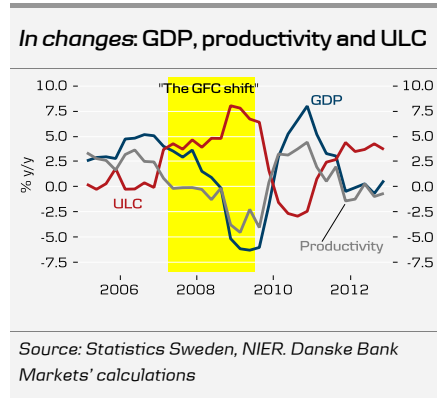
In 2012, then – and partially to sum up – the level of demand was around 2% higher than before pre-crisis peak, but approximately 8% below pre-crisis trend. The level of productivity was a tad (c.0.5%) below pre-crisis peak and an astonishing 13% below pre-crisis trend. **In retrospect, the GFC was of course a structural shock, entailing both a downward shift in the GDP level and a lower future rate of GDP growth.**

However, during “the GFC shift”, the highly centralized Swedish wage formation process continued to produce stable, near-normal wage agreements based on long-lasting – alas incorrect – assumptions of a resumption of pre-crisis demand (and productivity) trends. A fallacy that pushed up companies’ Unit Labour Costs to the obvious detriment of capital owners. To make things worse, companies – in the absence of pricing power due, *inter alia*, to the depressed demand situation – were also unable to compensate themselves for rising wage costs via higher prices. Or, to put in another way, during “the GFC shift”, the wage share of the Swedish economy shot up and the profit share, reciprocally, plummeted. As we will demonstrate, this legacy of the crisis haunts the Swedish economy to this day³.

Competitiveness needs to be restored, in a still weak global environment

It seems that the Swedish wage formation process, that worked so well in “normal” times, has been struggling in the “new normal” times after the GFC of 2008/09. This is because the crisis laid bare the most important limitation of the Swedish wage formation model: Low wage flexibility⁴ (at least in the face of an exogenous permanent negative shock to demand). This defect does not stem, *per se*, from the wage formation process but rather stems, by chance, from it being an integral part of the Swedish labour market model⁵.

From the discussions above it should be evident that these traits are important drawbacks when an economy is faced with a deep structural crisis like GFC. An ill-timed wage round in 2007 paired with a simple-minded view of a swift cyclical rebound further impaired the performance of Swedish competitiveness in conjunction with, and after, the acute phases of the crisis. This also pushed the profit share of GDP down to levels we have not seen for several decades and has – worryingly – held it there ever since (excluding a temporary recoil during the inventory swing in 2011).



³ To a large degree, our reasoning is laid out in this paper from the *Federal Reserve Bank of San Francisco*, but with the added complexity of a price taking small open economy and without the return to a higher GDP-trend.

⁴ While it is true that (downside) nominal rigidities in wage formation are a recurring trait of most/all labour market setups, empirical evidence suggest that rigidities are stronger in labour markets with a high degree of centralization, and that (especially negative) shocks take a longer time to consolidate within the economy, implying a bigger loss of welfare (GDP). Cf. ECB WP1084: “*How are Firms' Wages and Prices Linked?*”

⁵ Sweden, in addition to having a rigid wage formation process, is also among the countries with the strongest workers' protection. Cf.: “*OECD Indicators of Employment Protection*”

These developments are uniquely Swedish. In other countries, especially competing economies, wage growth (labour costs) has been subdued throughout the post-crisis recovery, resulting not only in restored profit shares, but also in even historically high profit shares. In some countries, notably Germany and the USA, this has even led to a political backlash in the form of higher (statutory) minimum wages.

As touched upon above, to counter or to bridge the (particularly) poor performance in the (goods) exports industry, both monetary and fiscal policy has been continuously expanded, paving the way for an unprecedented rise in household disposable incomes⁶. Strong domestic growth; strong private and public consumption and strong housing and public investments have forced up demand and productivity in domestic sectors, and also leading the profit share in “domestic” sectors higher, even above historical experience. However, despite decent consumption (and housing investment) growth over the past years, households have nonetheless remained unusually cautious as can be seen from the historically high savings ratio (currently at 16% of disposable incomes). – A pertinent question is if the underpinnings to this domestic outperformance are sustainable?

With inflation currently negative and the nominal interest rate *below* zero lower bound conventional monetary policy is exhausted. We assume the next Riksbank cut will be the last as banks have indicated that they will soon be forced to push the negative policy rate onto household deposits, exposing an already fragile financing source for the risk of a run – a risk that we believe the Riksbank is loathe to take. In other words, nominal interest rates have for all intents and purposes hit the practical zero lower bound.

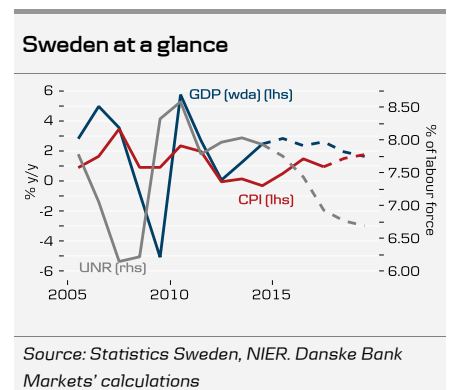
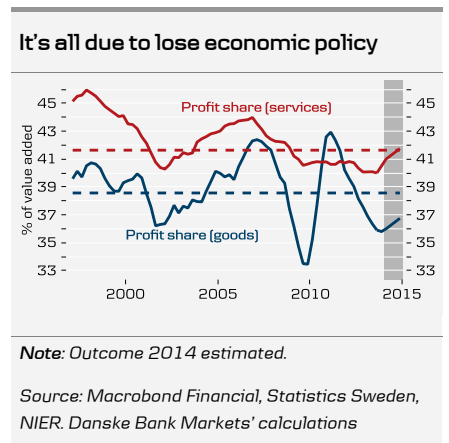
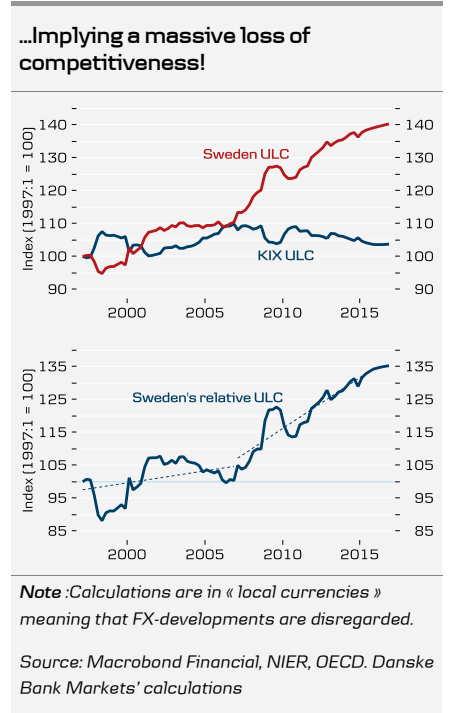
Contemplating the massive purchases of government bonds – Quantitative Easing (QE) – (to a total of SEK200bn, equivalent to 31% of the nominal stock and 6% of GDP) the unconventional monetary policy toolbox is also becoming depleted. So far (as 50% of the QE purchases have been completed), we have seen surprisingly small evidence of the Riksbank purchases corrupting market functioning, something which we ascribe to the extensive selling by foreign holders of Swedish government debt. That said, at some point the free float of Swedish bonds will dry up, and we believe this will force the Riksbank to cancel further purchases. Nonetheless, a last insignificant cut is still on the cards.

As for fiscal policy, the SEK200-250bn relaxation between 2006 and 2014 is now going into reverse as the current government seeks to address the undershoot of the binding surplus target largely via tax hikes and less via cut backs in the quality of public services (in a broad sense). This means that fiscal policy will serve to tighten economic conditions over the coming years.

Thus, monetary policy, as it is performed today, is at its limit and fiscal policy is constrained by the fiscal framework. In other words, overall economic policy, stabilisation policy, is set to become more restrictive over the coming years. We believe that this will happen despite the prevailing view of continued low resource utilisation.

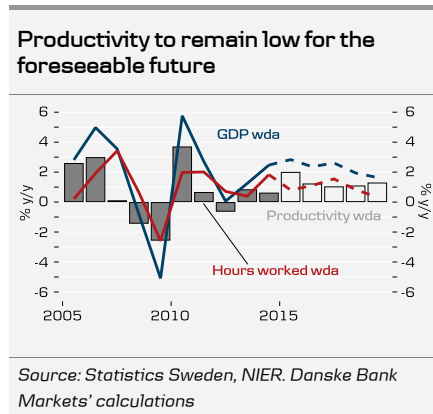
Nonetheless, our forecasts do point to a continuous improvement in demand (*cf.* Danske Bank Markets *Nordic Outlook*). Admittedly, growth rates are expected to be subdued from a historical perspective. Encouragingly, however, the composition of demand is expected to ameliorate as exports make some advance while previously exuberant

⁶ Back-of-the-envelope calculations suggest that the median Swedish household has received a net monthly income boost of circa SEK 7000 from lower interest rates, lower taxes and other policy related stimuli.



domestic demand growth subsides. This change in composition, to a more productive export sector, brings about a slight uptick in productivity, which increases the room for bargaining room proportionally.

To conclude: (1) Competitiveness has been eroded in conjunction with the Global Financial Crisis; (2) the structural break in Swedish GDP and productivity trends post-crisis was not (and is still not) sufficiently recognized by the social partners why wages have claimed a “too high” share of total incomes (GDP); (3) demand growth is too low to generate any stronger cost pressures in the foreseeable future; (4) nominal rigidities negate a “Gordian knot” solution, and; (5) companies are overwhelmingly “price takers” i.e cannot hike prices, why restoring the profit share will take a number of years, even if the lion’s share of productivity gains would accrue to employers.



Labour costs since the crisis and our take on wage growth (% y/y)

Factor	2008-now	2016-2019	Long-Run
CPIF	1.4	1.0	2.0
VAD	1.5	1.2	1.4
Productivity	1.0	1.2	1.3
Total Labour Costs	2.5	2.4	2.7

Note: Numbers include employers social contributions. VAD is the value added deflator.
Source: Statistics Sweden, OECD, NIER, Macrobond Financial. Danske Bank Markets' calculations

Danske Bank Marktets’ estimate of *sustainable* hourly wage growth is 2.75% y/y, which is probably lower than most other estimates, including amongst others, that of the NIER and the Riksbank’s. However, due to a *cyclical* need to lower the wage share and raise the profit share of GDP, we expect labour costs to rise by less than 2.5% y/y over the coming three years. Whether or not this is sufficient to rid companies’ of a too large a cost base and restore competitiveness and profits remains to be seen and we like to think of 2.5% y/y as the ceiling of the wage space available in the forthcoming negotiations.

Contemplating the Riksbank options

We expect wage growth to be slow. Companies are engaged in fierce competition and have no or little power to set prices independently. After a SEK-related boost to inflation, Danske Bank Markets expects inflation to recede again and to remain below the inflation target.

After a recent increase in QE in government bonds, a small additional cut is our main scenario for monetary policy. **However, going forward, if further stimuli becomes necessary – as seems likely – what can economic policy do?**

– Well, despite, in our view, the Riksbank having an overtly hostile attitude towards the Swedish housing market in general and household debt developments in particular, there

is a distinct possibility the Riksbank could follow in the Federal Reserve's footsteps and also start buying Swedish covered bonds and/or municipals. The Swedish covered bond market is highly liquid, with ample depth, and could sustain aggressive Riksbank buying for a longer period of time. Importantly, it is probably the only viable option if not more controversial assets (stocks, FX) are to be included in the Riksbank's purchases.

Another avenue to higher demand and inflation is, of course, via the use of fiscal policy. This has been thoroughly debated and arguably endorsed by academics from various schools of thought. Even though we too can see the theoretical and practical arguments in favour of using fiscal policy as monetary policy is at the zero lower bound (ZLB), we have some lingering feelings of discomfort of leaving stabilisation policy, again, in the hands of politicians. Also, the discussion on optimal debt levels is obviously far from settled⁷. Most importantly, bar any seismic shifts in EU basic law and Swedish fiscal policy legislation, such measures should be years, if not decades, away.

But the SEK isn't strong! – Or is it?

Unfortunately, the discussions on currency interventions have become extremely sensitive, but we think it is important to underline that as conventional and unconventional tools to address the low inflation have been worn down, logically the chance of controversial measures must increase. – We see clear benefits in using FX interventions over other UMP and possibly also over buying covered bonds and 'munis'.

First of all, it is paramount to understand the distinction between currency intervention under a fixed currency regime and under a floating currency regime.

- Under a fixed exchange rate regime, currency intervention equals devaluation and is all but certain to have the objective of improving competitiveness on behalf of peers (beggar-thy-neighbour).
- Under a floating exchange rate regime, FX interventions are instead a tool for affecting *expectations* of inflation via the *perception* among economic agents that a weaker currency *will* work – *confer* the foolproof way of escaping a liquidity trap⁸. A weaker currency is *certain* to raise import price inflation and/or make exports more competitive. If the central bank makes such a commitment – especially in a small open economy – then maybe the change in perceptions is sufficient for agents to raise their inflation expectations, perhaps even without a need for (extensive) actual interventions.

It follows that FX interventions – under an inflation targeting regime – are an instrument to use when interest rates are at or below the zero lower bound, and if the currency appreciates or is unduly strong, restraining demand further.

⁷ Confer *NBER Working paper 21574*

⁸ Confer LEO Svensson: "*Monetary Policy and Japan's Liquidity Trap*" (see also links and references in paper)

Is the SEK strong or not? – Most commentators, including the Riksbank, seem to be of the opinion that the SEK is – if anything – weak. Analysts often use the National Institute for Economic Research’s (NIER’s) effective exchange rate index, KIX, in either nominal or real (CPI-deflated) terms to gauge the currency’s impact on the economy. As the graph in the margin show, the SEK is in nominal terms close to its historical average and in real terms above, *i.e* is weaker, than it has been, on average, since it was allowed to float in November 1992. So, the SEK does not seem to be overvalued and normal fluctuations are hardly a problem. Case closed, right?

Not quite.

The ‘nuclear’ option is also the most exact and therefore ... likely?

– Let us elaborate: The atypical cyclical developments in the wake of the financial crisis, with strong *domestic* demand, are mainly the result of unparalleled monetary and fiscal policy stimuli over the past few years. Importantly, without strong external demand for Swedish export goods, these measures are *not* sustainable; fiscal policy must obey the legal framework demanding a one per cent surplus under a tight expenditure ceiling. Low, even slightly negative, interest rates will lose their stimulative effects if lowflation/deflation becomes entrenched and real interest rates will rise.

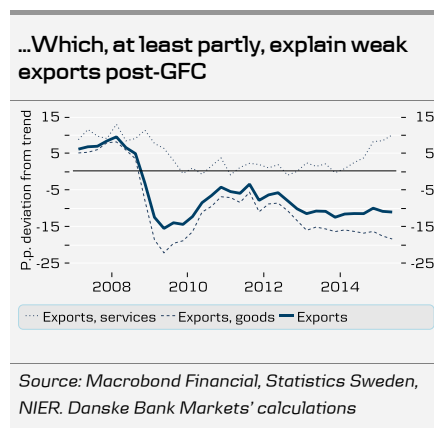
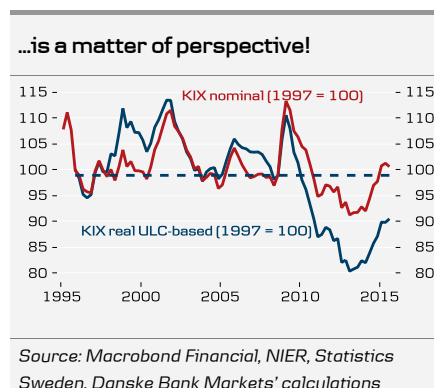
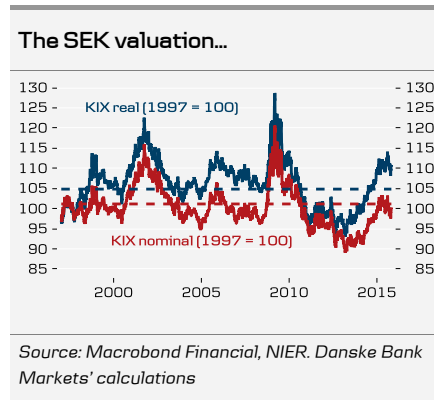
Moreover, a high wage share of GDP, paired with strong nominal rigidities, makes for a poisonous cocktail if international demand for Swedish export goods doesn’t pick up soon. It implies a very long, drawn out rebalancing process, marred by hysteresis effects (where the unemployed gradually become unemployable) and a corresponding loss of welfare. Or, put in another way, if the SEK is really as weak as the Riksbank and many others posit, how does that agree with Swedish exports and the Swedish exports industry being the main laggards of the Swedish economy?

For a small open economy, the currency is paramount when gauging policy stance and weighing future developments, mainly from a perspective of competitiveness. The SEK, together with relative cost developments – relative unit labour costs – does a very good job of explaining out- or under-performance of Swedish exports growth relative to world market growth⁹. Therefore, we have calculated a ULC-based KIX index, instead of using a proxy (CPI, PPI), that the Riksbank and other commentators rely on. It points to a different, and intriguing, picture of competitiveness in the wake of the financial crisis. Up until the GFC struck, the CPI-deflated and the ULC-deflated KIX-indices sport roughly the same qualities; In real terms, the SEK was on the weak side, explaining the – at the time – often surprisingly strong performance of the Swedish exports industry. As the crisis unfolded, however, the two measures parted ways. Whereas inflation has actually been lower in Sweden than elsewhere in the wake of the crisis, resulting in a weaker CPI-deflated KIX-index, the ULC-deflated KIX-index demonstrates that cost pressures have actually been considerably higher in Sweden than in competitor economies over the past few years (and competitiveness and exports therefore weak).

FX interventions by the Riksbank, we argue, is not only warranted to address the weak competitiveness, but could actually solve most of the problems cited above:

- FX-intervention bypasses the credit channel of the transmission mechanism while the impact on household borrowing and an already overheated housing market should be

⁹ For further information, I recommend this paper by D Campbell: “*Relative Prices, Hysteresis, and the Decline of American Manufacturing*”



minimal. It also avoids distorting (pricing on) the Swedish government bond market or other less liquid markets.

- A weaker SEK would stoke demand for typical Swedish export products, the laggard of the Swedish economy.
- Higher demand and higher capacity utilization would improve profitability in the exports sector and push the profit share higher.
- Improved profitability leads to new investments and higher employment.
- Higher employment will – *eventually* – lead to higher wages and a normalization of inflation expectations.
- Higher wages and inflation will increase tax revenues for the government and close (some of) the short-fall in public finances.
- Avoiding a liquidity trap, and a stronger Swedish aggregate demand, will in the long run prove beneficial also to our peers and competitors and is not the zero-sum game many commentators claim.

The above discussion on FX-interventions is based on the (New-Keynesian) expectations-augmented Phillips curve central to modern central banking. Admittedly, in the aftermath of the GFC, the New-Keynesian school of thought has been challenged from different, sometimes contradictory, perspectives. In our opinion, the questioning of the current monetary policy framework actually provides yet another reason to prefer FX-interventions over QE in government or mortgage bonds or negative interest rate policies or other measures. This is because even if the worst comes to the worst and the Riksbank's FX interventions indeed prove to be little else than a temporary competitive devaluation (i.e., fail to stoke inflation), the Riksbank will at least be sitting on sizeable FX reserves (if handled intelligently), which can be used to provide the economy with time to adapt to new structural circumstances.

Escaping from other options – should they fail – *e.g.*, escaping from too high public debt, or trying to resurrect a bond market devastated by large central bank interventions, would not at all be as painless. At the very least, the Swedish economy deserves a more forthright discussion on the policy options at hand.

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This research report has been prepared by Danske Bank Markets, a division of Danske Bank A/S ('Danske Bank'). The author of the research report is Roger Josefsson, Senior Analyst.

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