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Recent developments
The international economic climate: recovery on the way?

Prospects for the most important economies have improved, due in particular to more optimistic news from the United States (US). In the first quarter of 2002, the American economy staged a remarkable recovery, mainly supported by the build-up of stocks and robust private consumption growth. This positive development also resulted from budgetary impulses from the American government, combined with the Federal Reserve’s fast and substantial monetary expansion. The latter contributed to an increase in disposable household income as a result of mortgage refinancing at lower interest rates. The government lowered income taxes, amounting to around 0.5% of GDP. The fiscal balance has fallen nearly three percentage points in a little over a year, due in part to extra defence spending and the effect of the automatic stabilisers during the growth decline in 2001. Since January 2001, the Fed’s target interest rate target has been cut by 4.75% to a level of 1.75%.

Prospects for US consumption growth for the remainder of 2002 are mixed. The rise in consumer confidence is a positive signal (Chart 1). Optimism is somewhat tempered by disappointing labour market data, however. Unemployment increased in March, which can negatively affect consumption. The International Monetary Fund is predicting GDP growth of 2.3% for 2002. But it is difficult to predict the precise timeline for recovery. When considering earlier periods of economic decline in the US, it appears the American economy often recovers in a so-called ‘double dip’ fashion. In this type of W-like economic recovery, the initial growth swell is followed by a temporary economic decline before recovery takes hold. One reason behind this type of pattern is that companies start building up stockpiles, anticipating an economic recovery. A (strong) surge in stockpiling causes an increase in production, which is wrongly interpreted as a rise in final demand by producers in other parts of the industrial column or in other sectors. At times, this type of development is enough to stimulate a recovery, but often such a situation prompts a new decline until final demand recovers. The development of consumption in the first quarter points to this type of recovery, but business investments are lagging behind, around 7% below the level of the first quarter of 2001.

A cautious economic recovery appears to be on the way in the euro area, as preliminary indicators signalled several months ago. Data from individual countries in the euro area indicate more dynamic industrial production rates in January and February. Germany’s ifo index showed an unexpected sharp rise in May, following a slight decline in April and increases in the five preceding months. Purchasing managers indices for the industry and services sector provide a more positive picture. The slight improvement in consumer confidence since November and the increase in German retail sales suggest that consumption in the first quarter of this year will likely rise. Economic growth in the euro area lags behind that in the US. In the first quarter, gross domestic product in the euro area grew by only 0.1% compared with the previous year and by 0.2% quarter-on-quarter. Development in the first quarter mainly tracked the slowdown in private consumption growth (Table 1).

A rise in the oil price, as recently occurred (Chart 2), can push up inflation and consequently lead to a lower level of real available income and consumption. Euromon, the model developed by the Bank for the European economy, indicates that the recent oil price rise will boost inflation by 0.3 percentage point in a year’s time. The impact on economic growth is limited: the recent oil price rise will have a negative effect on GDP growth of –0.1 percentage point. A further rise in the oil price would increase this effect proportionately.

The Dutch economy: a mixed picture

The Dutch economy stood still during the first quarter of the current year. According to preliminary data from Statistics Netherlands, GDP growth was flat, both compared to the previous quarter and year-on-year (Table 2). Private consumption growth was around
1.25%, which approximates the moderate average percentage increase realised in the course of 2001. Business investments fell around 2% year-on-year. Industrial production fell over 2% in the first quarter, mainly as a result of lower demand from abroad. Growth all but disappeared in the commercial services sector as well. Government consumption growth declined, but was somewhat compensated by an acceleration in government investment in the first quarter of 2002.

The beginnings of a recovery are expected in the course of 2002 (see also 'The Dutch economy in 2002-2004: a forecast using morkmon' elsewhere in this Bulletin). This is based on the openness of the Dutch economy and the expectation of increased growth in key export destinations. Various provisional indicators signal that the domestic dynamic remains marginal. Following a rally around the New Year, consumer confidence has declined once again: both perceptions of the economic climate and consumption propensity have fallen. The consumer confidence index is currently at its lowest level since early 1994. Retail sales show a volume decline both in the food and non-food sectors. The development of housing prices also plays an important role in the area of private spending. In 1999 and 2000, the wealth effects of the housing market had a substantial positive impact on private spending, but then turned negative in 2001 (see also ‘Spotlight on household wealth management in the Netherlands’ elsewhere in this Bulletin).

Producer confidence has recovered somewhat since December. However, in February industrial production was 4% lower compared to the same month last year. Industrial capacity utilisation also continues to decline (Chart 3) so that the need to expand the production capacity is limited. This indicates that for the time being, business investments in particular will have a negative impact on economic growth. Planned govern-

### Table 1 Euro area economic growth

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2001</th>
<th>2002</th>
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<tr>
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<td>1.5</td>
<td>2.5</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
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<td>1.3</td>
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<td>0.3</td>
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<tr>
<td></td>
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</table>

Percentage changes on previous corresponding period

Gross contributions to gdp growth, percentage points

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<th></th>
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<th></th>
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<tr>
<td>Private consumption</td>
<td>1.4</td>
<td>1.0</td>
<td>1.1</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Government consumption</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Investment</td>
<td>1.0</td>
<td>-0.1</td>
<td>0.4</td>
<td>0.0</td>
<td>-0.4</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>0.1</td>
<td>-0.5</td>
<td>-0.1</td>
<td>-0.4</td>
<td>-1.1</td>
</tr>
<tr>
<td>Net exports</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Percentage changes on immediately preceding period

<table>
<thead>
<tr>
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<th>2001</th>
<th>2002</th>
<th>2002</th>
</tr>
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<tr>
<td>gdp</td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: Eurostat.
ment spending on infrastructure is expected to lead to a relatively strong growth in government investments.

Inflation and the labour market: a call for caution on the wage front

Dutch inflation (based on CPi) was an average of 3.8% in the first quarter of 2002, which was a substantial decline compared with the 4.3% level in the previous quarter (Chart 4). This decline was mainly due to the disappearance of the effect on the figures of the rise in VAT and the eco tax ('Regulatory Tax on Energy') introduced in January 2001. In April 2002, inflation stood at 3.6%. In that month, the tax on alcoholic drinks was increased, but was cut on non-alcoholic drinks. Fruit was substantially more expensive, while the price of fresh vegetables fell sharply. The April inflation figure was also influenced by base effects, namely the decrease in electricity rates introduced in April last year and the increase in meat prices following the outbreak of foot and mouth disease last year. Harmonised consumer price index (HICP) inflation in the Netherlands fell to 4.2%. The decline in the inflation standard is somewhat lagging behind expectations. This mainly appears to be the result of the strong increase in wage costs and the euro conversion, with the latter contributing an estimated 0.2 to 0.4 percentage point to inflation.1

Table 2 Netherlands’ economic growth

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>i</td>
<td>ii</td>
<td>iii</td>
</tr>
<tr>
<td>Percentage changes on previous corresponding period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>3.5</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Private consumption</td>
<td>3.8</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Government consumption</td>
<td>1.9</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Investment</td>
<td>3.8</td>
<td>-1.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>Exports</td>
<td>9.5</td>
<td>0.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Imports</td>
<td>9.4</td>
<td>0.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Gross contributions to GDP growth, percentage points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private consumption</td>
<td>1.9</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Government consumption</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Investment</td>
<td>0.8</td>
<td>-0.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>-0.2</td>
<td>-0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Net exports</td>
<td>0.6</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Percentage changes on immediately preceding period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>0.1</td>
<td>0.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Statistics Netherlands.

Chart 3 Utilisation rate in industry

Per centages; non-seasonally adjusted; quarterly figures

Source: Thomson Financial.
Although the Netherlands ceded the top spot as regards inflation to Ireland in January, Dutch hicp inflation remains higher than other euro area countries and considerably above the average of 2.5% for the euro area as a whole.

Wage development is of significant importance to the future development of inflation. Collective labour agreements for 2002 have been reached for 50% of private sector workers, yielding an average wage hike of 3.5%. A number of important collective labour agreements have been agreed in recent months, including for Philips, Corus and the building sector. The latter went hand in hand with the most widespread strikes since 1995 (Chart 5). From a macro-economic perspective, the average wage increase of 3.5% was substantial, given the strong decline in labour productivity and uncertainties surrounding the expected economic recovery (Chart 6).

The effect of the growth slowdown is gradually beginning to emerge in the form of increasing unemployment and in the development of job vacancy figures. The number of vacancies in the fourth quarter of 2001 fell sharply, mainly due to a decrease in the number of new vacancy postings. There were 194,000 new vacancies in the fourth quarter, or 60,000 fewer compared with the same quarter in the previous year. There were 167,000 unemployed registered in the three-month period from February through April, or 2.3% of the labour force. On a seasonally adjusted basis, unemployment stood at 163,000. While this figure remains exceptionally low, it appears that the continual decline in the percentage of unemployed, which started in 1994, has come to an end (Chart 7). Developments in employment lag somewhat behind economic growth, which justifies the expectation that the labour market situation will deteriorate in the near future. Generous collective labour agreements could delay an economic recovery in the Netherlands and push up unemployment to unnecessarily high levels.
Sector wage differentiation

Decentralisation of wage formation...

In the Netherlands, wage negotiations are conducted on a decentralised basis. Centralised guidelines have become less important over the past two decades. In principle, this creates more room in collective labour negotiations to respond to the position of individual companies and business sectors, enabling bottlenecks specific to certain sectors or companies to be solved more effectively. There is, however, a danger that centralised indications, insofar they are given, could impose an overly high floor in the labour market. A second development in the area of labour conditions talks is that a number of sector collective labour agreements have been replaced by company accords. This is true for the banking sector, for example. According to the labour inspectorate, 14% of all employees (insofar they are covered by collective labour agreements) fall under a company collective labour agreement. This represents a rise of around one percentage point compared to four years ago. Quantitatively, this is a limited shift, but the figure does not take account of new types of collective labour agreements whereby general agreements are made for the sector and details worked out in each company (such as the ‘framework collective labour agreement’ for the graphics and media sector). Thirdly, more room is created to work out details on an individual basis. Slowly but surely, new types of collective labour agreements are being developed that allow for a more customised approach and freedom of choice for individual employees. One example are the so-called à la carte collective labour agreements, which for instance allow employees to opt for more or less time off.

... but wage differentiation is not increasing

The figures do not yet indicate, however, that the more decentralised wage agreement system actually leads to greater differentiation in wages. The labour inspectorate publishes the dispersion of negotiated wage movements based on a sample of some 100 collective labour agreements. From the results, it can be concluded that the dispersion of negotiated wage movements in the period 1989-2001, measured by the standard deviation, was an average of 0.97 percentage point (with an average negotiated wage increase of 2.8%). No clear trend in this standard could be detected in that period (Chart 8). Assuming there are significant differences in labour productivity among the sectors, the fact that the dispersion of contractual wages is not increasing indicates that insufficient use is being made of the increased flexibility offered by the current wage formation model. The fact that there are significant differences among sectors in the number of unfilled vacancies indicates that labour mobility from one sector to another is limited. This lack of mobility is due not only to barriers to mobility but also to a lack of incentives. An imbalance in the relationships between supply and demand in the Netherlands should be more clearly reflected in remuneration levels in order to encourage a faster reallocation of employees. This is currently only

Chart 7 GDP growth and unemployment in the Netherlands

Percentage changes on previous corresponding period or percentages of labour force; quarterly and monthly figures

Source: Statistics Netherlands.

Chart 8 Wage differentiation between collective labour agreements

Standard deviation from negotiated wage movements in percentage points

Source: Labour inspectorate, DNB calculations.
happening on a limited basis. An explanation for the marginal differentiation in negotiated wage movements is the existence of wage leading industries. These are sectors and companies that set the tone for negotiations in other sectors. Another comparable mechanism is that the negotiated wage movement in sector collective labour agreements is not determined by sector-specific, but by macro-economic developments such as average labour productivity growth. Wage differentiation gives employees an incentive to move to a sector that is performing better. If there is insufficient wage differentiation, however, the potential increase in income will often fail to outweigh the employee’s mobility costs. This serves to uphold marginal labour mobility among sectors, which means production and employment fail to reach their potential levels.

Monetary developments

On May 2 the European Central Bank (ECB) decided to leave key interest rates unchanged. This means the ECB’s minimum rate against which banks can bid on the main refinancing operation remains at 3.25% for the sixth consecutive month. This interest rate decision was the result of an analysis of monetary, financial and economic developments in the euro area based on the two pillars of the ECB’s monetary policy strategy. This analysis reveals that the current level of interest rates is in line with the monetary policy aim of maintaining price stability in the euro area in the medium term.

In the second pillar of monetary policy strategy there are indications that a cautious economic recovery is underway in the euro area. These signals are mainly from sentiment indicators such as business and consumer confidence as well as surveys among purchasing managers. However, the recovery, which follows a growth slowdown that caused gross domestic product to shrink in the final quarter of 2001, is still in the very early stages. At year-end, the euro area economy’s pace of growth is expected to reach its potential level, which continues to lag that of the US.

Higher energy and food prices negatively impacted both the level of inflation and the rate at which it fell in the first half of 2002. Although incidental, the uncertainty surrounding how long it will take for these factors to be reflected in consumer price inflation implies an upside risk for inflation in the near future.

Monetary growth, which is analysed as part of the first pillar, has been lagging since the beginning of 2002. In the fourth quarter of 2001, growth of the broad monetary aggregate M3 was 8.2% on an annual basis, falling to 7.3% in the first quarter of 2002. The policy-relevant three-month average stood at 7.4% in April, compared to 7.9% in December 2001. Monetary growth thus remains well above the reference value of 4.5%. In evaluating this deviation, however, it should be taken into account that monetary developments after September 2001 have been strongly influenced by uncertainty on the financial markets. Investors, confronted with this uncertainty, showed a strong preference for liquid assets, and therefore shifted investments into components of M3, prompting monetary growth to accelerate. The current monetary growth slowdown indicates a possible normalisation of the liquidity preference. At the same time, the recent monetary expansion was accompanied by a deceleration in the growth of bank lending to the private sector in the euro area. This lending growth stood at 5.5% in the first quarter on an annual basis, compared to 6.1% in the final quarter of 2001 and 8.7% in the first quarter of last year.

Bank lending and housing developments in the Netherlands

As elsewhere, the expansion of bank lending has been decelerating considerably for some time. In 2001, this slowdown was mainly due to a strong decrease in the growth rate of other lending, most notably corporate lending (Chart 9). However, in the first quarter of 2002 the growth in other lending increased slightly to 4.4%
on an annual basis. The growth of mortgage lending actually fell to 10.1% on an annual basis, compared to 12.4% in the fourth quarter of 2001. Thus, the increase in total bank lending to the private sector was 6.8% in the first quarter on an annual basis, against 7.7% in the fourth quarter of 2001 and 12.1% in the first quarter of that year.

The Dutch housing market has been cooling down since the summer of 2000 (Chart 10). Nonetheless, the average annual house price increase has not fallen below 5.2% and there now appears to be a stable development in housing prices. The three-month average housing price increase was 6.9% in April on an annual basis, compared with 7.0% in December 2001. The cooling down of the housing market resulted in a decline in the number of mortgage loans issued on the surplus value of houses in 2001 compared with previous years. This halted (consumer) spending growth and therefore had a substantial macro-economic impact that is quantified elsewhere in this Quarterly Bulletin.

For the housing market as a whole, there are various factors currently supporting the price of homes. For example, the supply of houses in the highly populated west of the country is still insufficient to meet demand while the mortgage lending rate and unemployment remain at relatively low levels.

Although the housing market has stabilised as a whole, the more expensive sector appears to be cooling down further. This is evident from the strong increase in the number of days that detached homes were for sale in the first quarter compared with the same quarter in 2001 (Chart 11). This may be linked to the deterioration in the investment climate in 2001. People interested in this segment of the housing market generally have larger shareholdings compared to those in other segments of the market. This means that developments on the stock market play a relatively significant role in the top segment of the housing market. Reasoning along these lines, it is not surprising that current developments run somewhat counter to the trend seen in the years preceding 2000. Driven by a spirited increase in share prices, the increase in the price of detached homes outstripped that of other types of dwellings in those years.

**Budget policy**

The base upon which the budget policy for the coming years was founded has deteriorated significantly. A roughly balanced budget is forecast for the current year, while less than a year ago, a significant surplus (0.9% of GDP) was expected for 2002. The major adjustment in the expected budget result is mainly due to the economic slowdown that will negatively impact tax revenues in 2002. It is expected that revenues from wage and income taxes, in addition to VAT, will be affected in particular. Moreover, the effects will be felt of the tax revision implemented in 2001, which effectively amounted to a tax cut.
1 See the Quarterly Bulletin of March 2002 for a discussion of the influence of the euro conversion on inflation.
2 Labour inspectorate, Autumn report on 2001 collective labour agreements (also for preceding years, published under different titles).
3 The negotiated wage movement is an imperfect criterion for remunerating the labour production factor. The picture remains the same when exceptional forms of remuneration (one-off payments, bonuses, 13th month's salary, holiday pay, incentive pay) and fringe benefits are taken into account.
Latest developments in supervision

The past quarter saw tentative signs of a recovery of international economic activity. Banks’ results, however, were still feeling the lagged negative impact of lower economic growth and a rising number of bankruptcies. Compared to the first quarter of 2001, loan loss provisions were up and commission income was down. This decline was only partly offset by a rise in interest income, however, so that operating results after taxation have decreased.

Developments in the financial sector

Banks’ results

The first quarter of 2002 saw tentative signs of a recovery of international economic activity. This is a gratifying development which may be expected to have a positive impact on banks’ results in the longer term. At this point in time, however, the negative effects of the slowdown are still making themselves felt in a rising number of bankruptcies (Chart 1). This effect shows up in rising loan loss provisions on banks’ balance sheets. In the first quarter of 2002, about 60% more was added to the provisions than in the first quarter of 2001. But compared to the extremely high additions in the last quarter of 2001, a clearly discernible decline is in evidence.

Commission income is also down on the first quarter of 2001, and continues to exercise a negative influence on the operating results of the Dutch banking system. But there are major differences between individual institutions, which recorded both increases and decreases. On balance, commission income is declining less than in 2001 (Table 1).

Table 1: Results of Dutch banks

<table>
<thead>
<tr>
<th></th>
<th>Changes on same period previous year, per cent</th>
<th>Cumulative changes on same period previous year, per cent</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1999</td>
<td>2000</td>
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<tr>
<td>Total income</td>
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<td>17.5</td>
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<td>Interest</td>
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<tr>
<td>Commission</td>
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<td>28.9</td>
</tr>
<tr>
<td>Total expenses</td>
<td>11.8</td>
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<tr>
<td>Operating expenses</td>
<td>15.2</td>
<td>19.8</td>
</tr>
<tr>
<td>Provisions</td>
<td>-24.3</td>
<td>-14.6</td>
</tr>
<tr>
<td>Operating results after taxation</td>
<td>53.7</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Source: Statistics Netherlands.

Source: Nederlandsche Bank; annual figures may deviate slightly from quarterly figures owing to differences in the composition of the population.
As in earlier quarters, interest income is clearly on the increase, thanks in part to an expansion of lending. Chart 9 in ‘The Netherlands in the euro area’ shows that the growth of total lending is levelling off, which means that the increase in interest income is not accounted for by growth alone. Another major determinant is the favourable yield curve, with long-term rates well above short-term rates, which has a positive impact on banks’ performance (Chart 2).

In the previous Quarterly Bulletin, the reduction in banks’ expenses was welcomed as a possible end to the upward trend. However, the first quarter of 2002 again saw an – admittedly limited – rise in these expenses on last year. Apart from acquisitions, which not only affect costs but also exercise a positive influence on income, staff costs account for a major part of this increase. At the same time, the impact of cost-effective measures by individual banks is beginning to make itself felt, and several banks have already reported concrete improvements.

On balance, the above mix of positive and negative elements resulted in lower operating results after taxation. The decrease totals nearly 10%. Again, there are major differences between individual institutions.

**Real estate**

The mortgage market continued to grow in the first quarter of 2002. Again, this growth clearly exceeds that of private lending. Apart from an increase in the amount outstanding (by around 10%), the number of mortgages concluded has also gone up: Land Register data show a 17% rise on the first quarter of last year. The higher number of transactions is accounted for largely by the growing number of renegotiated mortgages. The increase in the Dutch mortgage debt, in combination with the marked rise in house prices relative to income, and high loan-to-value ratios are reasons for the Bank to continue monitoring developments carefully.

**International developments**

The most prominent international development continues to be the financial crisis in Argentina. Of the 94 defaults recorded by Standard & Poor’s on rated corporate loans, 38 were accounted for by Argentinian corporations. But for the Argentinian crisis, the number of defaults in the first quarter would more or less have equalled that in the first quarter of 2001. However, it must be noted that the amounts involved are smaller than the number of defaults suggests. Although Argentina accounts for some 40% of defaults, these represent an amount of USD 1.5 billion, and thus account for a mere 5% of the total amount involved in defaulted debt.

Apart from the problems assailing Argentina itself, the risk of this crisis spilling over to other countries in the region is a cause for concern. It is worth noting that Argentina’s neighbours seem to be weathering the crisis fairly well. Although Uruguay has had to resort to IMF support (and received a positive reaction from the IMF to its sound policy), the rest of the region seems relatively stable.

Given the interests of Dutch banks in the region, a possible spread of the crisis to Brazil could have an impact. However, the severity of the situation should not be overestimated. The credit spread (i.e. the differential between the interest rate on Brazilian government paper and the risk-free interest rate) shows that the market does not consider the chance of problems arising any greater than before the Argentinian crisis (Chart 3), while the number of defaults (two) on Brazilian loans with a Standard & Poor’s rating remained limited. Furthermore, as can be seen from Chart 4, the Dutch banks’ exposures to South America are not all that large.

Japan’s problems are of a totally different nature. An international payment crisis does not seem likely here, if only because Japanese debts are held notably by domestic creditors and Japan has vast foreign exchange reserves. The banking system’s financial situation is, however, a cause for concern. The balance sheets of the Japanese banks contain large numbers of non-performing loans. Fortunately, the Japanese regulator is currently tackling this problem more thoroughly than before. The expectation that the problems of the

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**Chart 2** Yield curve based on Euribor and Dutch public debt

![Yield curve chart]

Source: Datastream.
Japanese financial sector can be solved only with the aid of public funds and the increase in Japanese public debt have prompted Moody’s to downgrade Japan’s credit rating.

A positive development is the fact that abolition of part of the deposit guarantee scheme (as from the second quarter of 2002) seems to have been effected without notable problems. The Japanese government’s intention to reduce the guarantee scheme further as from 1 April 2003 will hopefully lead to greater market discipline and thus help to improve the soundness of the Japanese financial sector. The Bank will continue to monitor the situation in Japan. Given the limited exposures of Dutch banks to Japan and the relative soundness of the counterparties involved, the Bank sees no cause for concern where institutions subjected to Dutch supervision are concerned.

Consultation and regulation

The new Capital Accord

With the new Capital Accord, the regulators represented on the Basel Committee have formulated more risk-sensitive capital adequacy requirements which are tailored more accurately to banking practice. Refining the proposals and ensuring a level playing field for all banks and all creditors have taken up a great deal of time over the past few months. In the meantime, work on the new Accord has progressed to the point where its introduction is not expected to distort the level of total banking capital. The current proposals also lead to some reduction of the (average) capital requirements applicable to loans to medium-sized and small businesses, and measures have been taken to counter procyclical effects. The regulators on the Committee agree that no further issues will be dealt with in the Accord. Technically, further refinements might be considered, but would delay the Accord’s implementation. The current proposals constitute a pronounced improvement on the 1988 Accord. With a view to greater financial stability and greater efficiency within the banking system, the Accord should be implemented as soon as possible.

A study is to be undertaken in the last quarter of this year to ascertain whether the proposals have the desired impact. Six Dutch banks are expected to take part. Where necessary, technical adjustments will be made to the proposals. Following a last round of consultations of those involved, the Accord will hopefully be signed at end-2003. Given the time it takes before European regulations take effect, the Accord will be implemented three years after being signed.

Electronic money

The efficient exercise of supervision on institutions which issue electronic money (e-money) is a complex issue. On the one hand, issuing e-money is practically tantamount to engaging in banking business and should hence be supervised. On the other, applying the full banking supervisory regime to institutions which merely issue electronic money seems rather heavy-handed. Following a lengthy process, a European directive was adopted at end-2000 ‘on the taking up, pursuit of and prudential supervision of the business of electronic money institutions’, which is to be implemented...

The amendments to the Act are intended to offer electronic money institutions sufficient flexibility while countering regulatory arbitrage. A limited supervisory regime will be applied to these institutions; to qualify, they will have to meet several strict conditions. With a view to consumer protection, they will furthermore be subjected to a number of other measures. In concrete, the minimum own funds of such an institution must be €1 million at the outset, and must equal at least 2% of its outstanding e-money liabilities. Electronic money institutions are also subject to investment limitations: the funds held against e-money liabilities may be invested in selected assets only. This is to curb the risk which an electronic money institution can run on the funds entrusted to it. The requirements imposed by prudential supervision on these institutions are tailored specifically to their activities; furthermore, they are not permitted to engage in activities other than issuing e-money and closely related activities.

To protect consumers, the e-money issued must represent at least the same value as the ‘traditional’ money received in exchange. Conversely, the issuing institution must be prepared to exchange e-money for non-cash funds or currency.

Act on the Supervision of the Credit System in force for 50 years
On the occasion of the 50th birthday of the Act on the Supervision of the Credit System, the Bank organised a conference ‘Banking Supervision at the Crossroads’. On the first day of this two-day conference, several prominent policy-makers discussed the ‘Convergence of Supervisory Practices’. Their contributions addressed recent developments with regard to the institutional shape of supervision in Europe in general and in the Netherlands and Germany in particular. Other major topics were the developments surrounding the new Capital Accord and the importance of maintaining a level playing field for banking.

The second day was devoted to more academic views on banking supervision. The subjects discussed included deposit insurance, the diversification advantages of financial conglomerates, the procyclical nature of modern credit risk models and, finally, the characteristics of an optimum supervisory regime. The contributions covered a wide range of issues, underscoring that supervision is multi-faceted, and that each of these aspects can contribute to guaranteeing a stable financial system. The various contributions can be found on the Bank’s website (www.dnb.nl).

Supervision on trust offices and finance companies
Partly as a result of the events on 11 September, regulators are seeking ways of reinforcing integrity supervision which allow of prompt reactions to crisis situations, without burdening the business sector with unnecessary administrative procedures. A number of measures intended to provide greater control over financial flows in the Netherlands were announced in the Bank’s Quarterly Bulletin of December 2001. The objective was to subject all trust offices and other institutions which have been given dispensation or which are exempted from authorisation (finance companies) to integrity supervision.

Following discussions with market parties, finance companies’ obligation to register has been amended by the Ministry of Finance. As a result, the Bank will maintain a central register of finance companies. In the event of a calamity, this register can be resorted to. In line with the ‘gatekeeper concept’ of the Financial Action Task Force, the other integrity articles have been cancelled. In brief, the gatekeeper concept entails that trust offices will become subject to the Bank’s supervision. Finance companies and other trust office customers will be monitored indirectly, via the supervision on trust offices.
Current developments in payments and securities systems

Five months after the introduction of the euro, the pattern of banknote circulation seems to be stabilising. Not all guilder notes have as yet been restored to the Bank. Research has shown that people in the Netherlands generally like the euro notes, but do not rate them as highly as they did the guilder notes. However, the public is better informed of the security features than in the age of the guilder, and that must be due to the intensive publicity campaign.

In public debates over the introduction of the euro, people expressed dissatisfaction from time to time about perceived inefficiency in the operation of the payments market. In view of the social importance of payments, the Dutch government responded by commissioning a study. The results and proposed improvements were published recently, and were largely welcomed by market players.

In the case of securities transactions, Euronext is continuing to integrate the operating processes. In that connection, the French clearing system ‘Clearing 21’ will be introduced in Amsterdam in October of this year. Significant changes in the settlement systems, such as these, are tested beforehand by the Bank and the Netherlands Authority for the Financial Markets (Autoriteit-FM / the Authority).

Circulation and distribution of banknotes and coins

Euro banknotes in the Netherlands
The net issue1 of euro banknotes in the Netherlands seems to be stabilising (Chart 1). At the end of May 2002, the Bank had placed a net total of €268 million euro banknotes in circulation, virtually the same volume as at the end of February 2002. In January, the net issue was even higher owing to the front loading of euro banknotes, mainly involving the issue of many small denomination notes. However, in the case of the three smallest denominations (particularly the €5), fewer notes proved to be necessary for active payments than expected and ordered by banks and cash-handling organisations before the changeover to euro notes and coins. Although the number of euro notes in circulation has fallen below January’s peak, the total value of the net euro note issue in the Netherlands has increased since the conversion to the euro. Demand for the larger denominations is rising, as people replenish their cash savings. The total value of all banknotes in circulation was €12.3 billion at the end of May 2002 (euros: €11.4 billion and guilders: €0.9 billion). However, this was still 30% below the level at the end of December 2000.

The net issue of euro banknotes is likely to increase gradually, but will nonetheless end up at a structurally lower level than the guilder circulation at the end of 2000. The steadily increasing popularity of electronic payments through retailers is one factor here. In the first five months of 2002, the number of pin card payments was roughly 17% higher than in the same period of the previous year. Since the introduction of euro notes and coins, the use of the ‘chip’ card has risen dramatically. The number of transactions averages 1.6 million a week,

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Chart 1 Euro banknotes in circulation
End-of-month data

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<thead>
<tr>
<th>Volume in millions of units</th>
<th>Value in € billions</th>
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<td>250</td>
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Net volume of euro banknotes circulated by DNB
Total euro area, right-hand scale

DNB / Quarterly Bulletin June 2002
roughly three times the level of a year ago. Growth has been greatest in the car parking segment (see Quarterly Bulletin, March 2002). However, the number of chip card payments is still modest compared to the number of pin card payments and point-of-sale cash payments; these average 20 million and – at a rough estimate – 125 million a week respectively.

The contraction in banknote circulation compared to last year has not curbed the strong growth seen in recent years in the volumes received and issued by the Bank (the reason being that the banks are depositing the notes with the Bank increasingly quickly). In April and May there was a further rise in the average volume of both incoming and outgoing banknotes, compared to the same period in 2001.

**Euro coins**
The net quantity of euro coins placed in circulation declined in February and March. Since April, however, the net issue of euro coins has risen in value. At the end of May there was a net total of 1.8 billion euro coins in circulation, worth €566 million. That is just 27% of the 6.4 billion guilder coins in circulation at the end of 2000. Here it must be borne in mind that the circulation figure for guilder coins was distorted because a large quantity had been lost or had otherwise disappeared (‘wastage’).

**Circulation in the euro area**
In the euro area as a whole, the circulation of banknotes has contracted since January, just as it has in the Netherlands. At the end of April 2002 the circulation totalled 7.2 billion euro banknotes (€271.1 billion), against 7.8 billion euro banknotes (€221.5 billion) at the end of January. As in the Netherlands, the circulation in the rest of the euro area is below that for the former national currencies at the end of 2000.

The popularity of the various denominations differs from country to country. In the euro area, the €20 and €50 denominations are the most popular, each accounting for around 25% of the circulation. However, in the Netherlands the denomination in by far the greatest demand is the €50 note, with a 38% share, followed by the €10 with 23%. In the case of the Netherlands, the €50 can be viewed as replacing the nlg 100, which was the most popular guilder note.

**Guilder circulation**
As regards the guilder circulation, at the end of May 2002, 47 million notes and 3.8 billion coins had not yet been restored to the Bank (Chart 2). The proportion of coins restored to the Bank was smaller than the proportion of banknotes. This is because of the ‘wastage’ aspect mentioned earlier.

**Opinion on the banknotes**
Since the beginning of the 1980s, the Bank has been commissioning a market survey every two years on people’s familiarity with the various Dutch banknotes, and their aesthetic rating of the designs. At the beginning of 2002, following on from that, the nipo [Netherlands Institute for Public Opinion and Market Research] conducted a first survey for the Bank on people’s knowledge of euro banknotes and how they rated them. Some 2000 people were questioned.

Banknotes are just like other products in that the public’s reactions must be ascertained in order to ensure a good design and further improvements. In the case of banknotes, demand is no indicator of opinions on a new model, as the public cannot choose between two models of a single denomination. In addition, the public is more interested in the value than in the design. The guilder design which was considered the most aesthetically pleasing, the nlg 250, accounted for just 4.5% of the total guilder circulation. The Bank uses a repeat consumer survey, always applying the same method. The survey results can make an essential contribution towards improving new banknote designs and the associated information campaigns. Other central banks are invited to initiate a similar survey.
As time goes by, the rating accorded to banknotes will fluctuate; that may be due to the publicity associated with the introduction of a new banknote and to familiarity (Chart 3). The Dutch always rated the guilder notes very highly: in 1999 these scored over 8 on a scale of 1 to 10. The euro notes score just under 7 on average, with hardly any apparent difference between the various denominations. Only the grey €5 note scores a mere 5.4. There is no clear-cut reason for the difference in scores between guilders and euro notes. One factor here is the brightness of the colours. Colour is one of the key design features. Pale colours are generally rated less highly by the public. Euro notes therefore score less well on that point.

Research has shown that the higher a banknote’s rating, the better the public’s knowledge of that note. This indicates that the public is better able to check the security features in the case of highly rated designs. That is one reason for conducting repeat surveys on people’s opinions of banknotes.

Knowledge of security features

Knowledge of banknotes has been found to increase over time. Between 1983 and 1999, the public’s knowledge of the security features of guilder banknotes increased from 1.0 to 1.7 features (Chart 4). On average, the Dutch are able to name 2.3 security features of the euro notes; that is noticeably more than they could for the guilder notes. That is presumably due to the mass publicity campaign in the Netherlands accompanying the introduction of the euro notes and coins, something which had never been done before. Older people and the less well-off tended to know less about the security features when interviewed. On average, men have a slightly better knowledge of security features than women (2.5 versus 2.1). The watermark is the best known security feature, as it was for the guilder notes. It was known to 70% of those questioned. Next came the hologram (61%), the security thread (31%) and the special ink on the reverse (10%).

Operation of the payments market

In recent years there has been publicity about a number of aspects of payments services which have also attracted the attention of the government and the Bank. The background to this was a growing dissatisfaction among market players about the operation of the payments market. Organisations representing retailers (shops, restaurants, petrol stations, etc.) mentioned high PIN charges and inefficient market forces in electronic funds transfers. Consumer organisations were concerned about the declining standard of service and higher costs, while the banks responded by stating that payments services did not cover the costs. Researchers announced that the market does not operate satisfactorily, in view of the small number of innovations, for
instance, and the impediments discouraging a change of bank.

From the public perspective, retail payments are essential to the operation of a market economy. The Bank therefore exercises oversight over the reliability and security of the interbank settlement systems. The organisation of these payments is generally left to the market players, because if there is sufficient competition the market should be able to allocate the factors of production efficiently. It is only in cases where market forces are ineffective that the competent authority has a role to play. Market signals indicated a need to examine market efficiency. In April of last year the Minister of Finance therefore commissioned a study of the mass payments charging structure and infrastructure, conducted jointly by the Bank and the banks in consultation with the user organisations. An article elsewhere in this Quarterly Bulletin gives a detailed account of the survey and the recommendations. At the beginning of 2002, the Ministry of Economic Affairs asked an external agency to examine the technical feasibility of number portability. This was part of a broad research project on Market Efficiency, Deregulation and Legislative Quality (mdw).

Reactions to DNB recommendations
On the basis of the report of the Working Party on Charging Structures and Infrastructure, the Bank drew up recommendations for improving the efficiency of the payments market. They concern such matters as a more transparent charging structure for consumers, better structured consultation between market players, and adjustments to the Interpay governance structure. It is evident from the response that the banks, retailers, the Consumers’ Association and the Payments Services User Platform broadly endorse the recommendations. They also agree with the report’s conclusion that, in future, it will be important to have information on the efficiency for society of point of sale means of payment, so that relatively cheaper payment products can be given preference. Furthermore, retailers and the Consumers’ Association propose that the mdw (Netherlands Competition Authority) should focus its supervision more specifically on the smooth operation of the market. As regards the recommendation on creating a transparent charging structure – by offering consumers a choice between free transfers and higher interest on their cheque accounts – the banks point out that the cheque account is often part of a package with its own scale of charges, and that the current practice (no interest, no charges) is the outcome of consumer preferences.

In a letter to the Parliament, the Minister stated that he was pleased at the predominantly favourable response, so that he was hopeful that the plans for implementing the recommendations would be available in outline by 1 September of this year, as far as possible.

The Bank has now launched its own survey on possible improvements to the efficiency of the cash-related infrastructure and is considering ways of intensifying the oversight of Interpay. In addition, the Bank will take the lead in the survey of costs and will, if requested, play an active role in the public consultation.

Accessibility of payment services
On the payments market, the banks’ efforts to achieve efficiency may not always chime with the accessibility of their services. This concerns both the reduced availability resulting from branch closures and the limited accessibility (practicality) of new products and distribution channels for certain groups of consumers, particularly the elderly and the disabled. Safeguarding adequate availability and accessibility is important for society. The board of the Netherlands Bankers’ Association (nvb) set up the Committee on the Accessibility of Payments Services with the task of making recommendations to nvb members on improvements to the availability and accessibility of banking services, particularly as regards cash withdrawals. The final report came out at the beginning of May. It states that the number of points where cash can be withdrawn has increased over the past ten years because the number of cash dispensers installed has exceeded the number of bank branch closures. Availability has therefore improved, especially as the cash dispensers operate 24 hours a day. The report finds that the closure of bank branches – particularly in thinly populated areas – and the growing feeling of insecurity among people using cash dispensers are general social phenomena. The nvb makes a number of recommendations for improving the practicability of old and new distribution channels for certain groups of consumers. The main ones are the improvement of communication with customers, possibly combined with the provision of ‘push button courses’, improvements to the withdrawal service for disabled customers, such as assisted self-service and the issue of special service passes, and examination of the scope for modified distribution forms such as a mobile bank or a ‘neighbourhood service’ concept. Banks have already presented solutions in the form of a cash delivery service and special counter passes, and are considering the possibility of offering simple services via supermarkets (‘in-store banking’).
Account number portability

In public debates and in the literature it is often said that the operation of the payments market is hampered by the difficulty of changing banks. This is because it necessarily entails changing the account number. The problem is greatest in the case of direct debits, because each firm with a direct debit mandate has to be notified of the change of number, and the firms have to enter those changes in their records. It is hardly possible to make comparisons with other countries, because nowhere in the world – except in Sweden – can bank customers keep their account number if they change their bank.

Retaining the account number, ‘account number portability’, might improve competition on the payments market. There is no point in switching to another bank unless there are significant differences in the standard of service and the price. The question is how the introduction of account number portability might affect market relationships. It is conceivable that the threat of the possibility of a quick switch might lead to improvements in service or charges. It is also very possible that it could encourage the separation of payment products from other financial products attracting interest, and could thereby enhance transparency, e.g. in combination with the introduction of transaction-based charges.

Account number portability requires a uniform system of accounts and controls, and that does not currently exist in the Netherlands. On the one hand, there is the Postbank which uses serial numbers (almost 8 million with a maximum of seven digits) and name/number checks which can only be processed in its own systems. On the other hand, there are the banks which participate in Interpay, which use nine-digit account numbers (around 14 million) permitting automated possibility checks. A further complication is the account system chosen in the euro area: the International Bank Account Number (iban). In addition to the account number, this also comprises a bank identifier (e.g. nL 96 Rabo 0612349678). As a result, if numbers were portable, a change of bank would cause various accounting systems of banks, businesses and consumers to incur costs in altering the international bank number. In Europe, however, iban is seen as the way of reducing the costs of cross-border euro payments, because it permits straight-through-processing. Infrastructure solutions are conceivable for both the domestic and the European problem, but they will also entail costs.

Banks are not in favour of account number portability. There seems to be little need, the costs are high and the benefits uncertain. To deal with the commonest complaint, the banks are introducing a removal service before the end of the year. This means that a bank welcoming a new account holder will arrange the transfer of the direct debit mandates to the new account number.

In the press, the Minister of Finance stated that he was in favour of account number portability. The Bank supports infrastructure modifications which will benefit the social efficiency of payments services. However, before deciding on account number portability, it is important to conduct a fundamental assessment, weighing the short-term investment against the long-term social benefits; here, the operation of market forces also means that the costs should be borne by the market players in proportion to their profits. The removal service is at least a step in the right direction.

Oversight of payments and securities transactions

The bank exercises ‘oversight’ of payment systems (particularly Interpay) and stock market settlement systems in order to ensure the reliable, secure and efficient settlement of payments and securities transactions.

Securities clearing

Since February 2001, Clearnet, a clearing institution which is based in France and is part of the Euronext organisation, has been performing the legal role of central counterparty for trades on all Euronext markets in securities and derivatives. As the central counterparty, Clearnet assumes the counterparty risk for the buyer or seller by taking over the contract for transactions effected in the market. Via the clearing system, transactions are processed and multilateral netting of positions can take place. The plan is to complete the operational amalgamation of the clearing systems as of 25 October 2002, via introduction of the French clearing platform, Clearing 21, for the Dutch market. This platform is already operational in Belgium and France. Euronext nv and Euronext Amsterdam having been granted official exchange status, the introduction of Clearing 21 in Euronext Amsterdam will first be assessed by the Bank together with the Netherlands Authority for the Financial Markets. This examination will focus particularly on Clearnet’s risk management strategy and will also check whether the requirements laid down in the Oversight Framework Euronext Clearing and Settlement (€58) are satisfied. For instance, the method
proposed in Clearing 21 for calculating the margin that clearing members must deposit differs in several important respects from the present margin method. Margin is the sum of cash or other collateral which the clearing member provides to Clearnet as partial security for the obligations entered into. If a clearing member is unable to meet its obligations, Clearnet uses the margin to cover the losses suffered. The international Coordination Committee on Clearing, in which the Bank also participates, will discuss the results of the examination with colleague overseers in Belgium and France, and will coordinate any action.

Securities settlement
The sale by Euronext of the settlement systems of the Dutch depository company, Necigef to Euroclear, an international settlement organisation based in Belgium, was examined and approved by the Bank, the Netherlands Authority for the Financial Markets (the Authority) and the Minister of Finance. First, the Bank together with the Authority confirmed that the criteria set out in the Oversight Framework are met. This lays down minimum requirements which must be met, e.g. as regards the legal basis, risk management and operational reliability. In addition, they examined whether the conditions which the Minister had previously attached to the official exchange status of Euronext were fulfilled. The Authority also advised the Minister on the requirements which the sale must meet in order to protect the interests of investors under the Securities Book-Entry Transfer Act (Wet giraal effectenverkeer).

The settlement of stock market transactions and the transfer of securities takes place via securities settlement systems. The corresponding money transfer takes place in the Netherlands in central bank money via the Bank’s payment system, top. Euroclear now intends to create a single platform for the Euronext markets for the settlement of trades, in accordance with developments in the world of clearing. The migration from the national settlement platforms of Necigef and clik (the Belgian depository company) to Euroclear Bank, scheduled for 2004, has already begun. An international Settlement Committee has been set up to ensure proper international coordination of oversight in the settlement sphere. The overseers concerned from France, Belgium and the Netherlands participate in the committee. In the coming period, this committee will concentrate mainly on the continuing integration of the various national settlement platforms. Their work will be based partly on examination of the proposed changes which will take place by reference to the test criteria included in the Oversight Framework.

The Oversight Framework will be evaluated in due course in the light of the securities settlement system standards currently being developed by the European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CERS). The purpose of these standards is to promote the reliability and efficiency of clearing and settlement systems, to reduce systemic risk and to create a level playing field. They are drawn up on the basis of the recommendations for securities settlement systems devised by CPSS – IOSCO (g10 central banks and securities overseers). In March, the ESCB-CERS launched consultations with the relevant market players, so that they can express their views and contribute to the preparation of these standards.

Electronic money
Electronic money is defined as the money value stored on an electronic medium which can be used for various payment purposes, including at institutions other than the issuer of the medium. In the Netherlands, one example is the balance on a prepaid card (the ‘chip-knip’). In the light of the duty of central banks to promote the efficiency of payments systems, the ESCB drew up the report on electronic money systems: Electronic Money Schemes Security Objectives. The report describes security objectives for electronic money systems, elaborating further on the ESCB’s 1998 Report on electronic money. The report was drawn up according to the Common Criteria methodology, an international standard method of describing security requirements. Security requirements are aimed at safeguarding the reliability and technical security of electronic money systems and increasing the public’s confidence in those systems. Other objectives pursued by the proposed security requirements are the creation of a level playing field for electronic money systems in the various countries, and facilitating interoperability between the various systems. This report was recently presented to the relevant market players for consultation. The next step is to develop the security objectives into more detailed requirements.

1 Net issue: the number of banknotes placed in circulation by the Bank minus the number of notes withdrawn by the Bank. In the case of the Netherlands, it is no longer possible to determine the exact number of euro notes in circulation, as some of the notes placed in circulation will end up in other countries, e.g. because tourists take cash with them when going abroad. Conversely, euro banknotes issued in other countries will also circulate in the Netherlands. The same applies to the euro coins.
Articles
Spotlight on household wealth management in the Netherlands

This article analyses the way Dutch households deal with their assets and liabilities, drawing on a survey commissioned by the Nederlandsche Bank in March. As guardian of financial stability, the Bank has a need for insights such as those offered by the survey’s findings.

The article’s main focus is on the manner in which the Dutch manage their wealth and their key motives for the choices they make. The growing importance of equity investment and the significance of providing for old age are cases in point. Pension objectives are seen to have a major impact on resource management in many families. The survey shows a large number of people planning to retire well before the age of 65 and also finds widespread concern about the continued existence of the country’s blanket old-age pension (AOW) in its current form.

Home ownership and its related mortgage debts – key components of wealth for the majority of Dutch people – merit special attention, as does the macroeconomic impact of house-price movements on spending. Mortgage-loans-driven consumer spending has had a profound effect on economic trends, boosting growth by 1 percentage point in 2000 and depressing it by 0.5 percentage point in 2001. Add in its concomitant effect on wage and price increases – 0.5% and 0.3% last year – and one is looking at a significant impact indeed.
Introduction

This article’s first section will briefly outline a few general trends in the financial position of Dutch households, also taking on board relevant literature pertaining to household wealth management. The second section throws the spotlight on some key aspects of wealth management by Dutch households, based on a survey commissioned by the Nederlandsche Bank. Specific groups of households were surveyed on the average breakdown of their actual wealth portfolios and on how actively they manage their resources. Those polled were subsequently asked why they opted for specific categories of assets. For many families, home ownership – and its related mortgage debt – accounts for a major proportion of assets. Which is why this article devotes a separate section to home ownership and mortgages and also presents calculations of the housing market’s recent impact on spending. Provisioning for old age is a final feature of Dutch resource management, as the survey found retirement to be a key factor in households’ financial decision-making.

Wealth trends: general review

Over the past 15 years Dutch households have seen their net wealth – i.e., assets minus debts – as a percentage of disposable income rise to around 800% (Table 1), making them generally better off than their counterparts in the world’s seven largest industrialised countries. Only in Japan and the United Kingdom do households boast comparable net-wealth levels. In the Netherlands, private assets really took off in the 1990s on the back of rising share and house prices, with the other wealth contributor – household savings – accounting for an increasingly smaller proportion of wealth creation (Chart 1). As a result, growing wealth has become much more a matter of ‘organic’ change and less a reflection of active household choices – a phenomenon seen all over the world.

That said, Dutch wealth trends also reflect a major increase in the degree of household participation in capital markets, with the proportion of households directly owning shares or holding equities through mutual funds up from 11% in 1995 according to Statistics Netherlands (CBS) to 27% in 2002 according to the Nederlandsche Bank’s survey findings as reviewed later in this article. Mutual funds have made a major contribution to the spread of share ownership among the wider Dutch population. Allowing for a broad diversification across asset classes with different risk profiles at low cost, investment funds are particularly attractive for households having only relatively minor amounts to invest. In addition, households indirectly own equities through mortgages with an investment component as well as through pension schemes and life insurance policies. Contractual savings are the second-largest contributor to household wealth after home ownership, accounting for more than 30% of assets in 2001. With over half of pension money invested in equities, the importance of the stockmarket to households’ financial positions is much greater than one would surmise on the basis of direct shareholdings. In this respect the Netherlands stands out internationally and most definitely within a European context. Only the United States boasts higher direct and indirect equity market participation rates. In the Netherlands, growing com-

Table 1 Dutch household wealth

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</table>

Source: Dutch Central Planning Bureau (cpb). † Including pension assets.
petition and consolidation in the financial services industry probably represents a special contributory factor behind the upsurge in – indirect – share ownership. Banks, insurers and investment companies joining forces has given a boost to the development of products with an investment component, such as life insurance investing premiums in securities. Like share ownership, home ownership has jumped in the last decade or so, from 35% in the early 1970s to 52% of households in 2000. Growing share ownership and to a lesser degree also home ownership may be taken as an indication of a more conscious approach to wealth management among Dutch families. After all, equities tend to produce higher returns in the long term than do savings. That households are taking the long view is quite understandable against the backdrop of an improved flow of information about financial products, greater prosperity and an ageing population.

Growing impact of share and house prices
Since the second half of the 1990s private savings have been increasingly influenced by the 'wealth effect', with households saving less as their homes and share portfolios have notched up gains. This is one reason why the savings ratio – free savings as a percentage of disposable income – came down from 5.6% in 1995 to a negative 1.3% in 2000. At the same time, households have increased their borrowings, pushing up the debt-income ratio to 86% in 2001 – with mortgage debt accounting for the bulk of this figure. Steeper debt figures reflect a loosening of lending criteria: new types of mortgages, for instance, make it attractive for homeowners to cash in on their assets and thus facilitate capital-gains-fuelled consumer spending.

Rising debt has come with higher risk profiles: between 1991 and 2001 the proportion of total wealth jointly accounted for by home ownership and share ownership rose from 36% to over 49%, with 'risk-free' assets such as deposits and bonds knocked down from 19% to 13%. These shifts in the breakdown of household wealth imply that family wealth has become more vulnerable to sentiment in the housing and equity markets. The fall in equity prices since 2000 was therefore one factor behind the decline in the net wealth ratio in 2001, the first such drop in a decade. Last year saw households rebalance their wealth portfolios, quite possibly in response to this deterioration in their wealth positions but probably also because of the slowing economy and falling consumer confidence. As a result, the savings ratio bounced back to 3.5% and banks recorded a steep increase in savings. At mutual funds, this rather more cautious approach among households showed up in a growing preference for less risky asset classes such as bonds (Chart 2).

Recent trends suggest that increased household participation in the capital markets may in the future make for greater economic volatility as financial management, savings and consumer spending are ever more closely tied in with financial market cycles.

Risk distribution and investment
With households running wealth portfolios at higher risk profiles, an obvious move would be to spread such wealth across different asset classes in order to contain risks. The degree to which people distribute their wealth across various categories – by buying equities, for instance – tends to hinge on a number of individual characteristics. In theory, the degree of participation shows a positive correlation to age: wealth tends to increase as one gets older, as does the gathering of information crucial to investment. However, research shows the information argument to be less than convincing: share ownership has been found to peak for people in their fifties and to be less widespread among younger and older generations. A positive correlation between income levels and equity market participation does show up: those in higher income brackets tend to find transaction costs less of a burden and are better cushioned against swings in share prices. Actual household wealth is another factor determining the degree of share ownership, for much the same reasons.
Spotlight on household wealth management in the Netherlands

The role of home ownership
Home ownership is one important constraint on a wealth portfolio’s optimum risk/return profile. As residential properties are bought to live in first and foremost (i.e., the consumption argument), households tend to have more capital invested in their homes than would be desirable purely from an investment point of view. This is particularly true for young owner-occupying households, which by and large have less financial clout than do older families. With properties prone to price fluctuations, (young) homeowners have a tendency to hold risk-free assets as a cushion 1, while their risk aversion is fed by monthly mortgage payments and a desire to reduce mortgage financing concerns.

Incidentally, this assumption – that home ownership discourages the acquisition of other risky assets – ignores the collateral aspect to a property and the emergence of new financial products facilitating the exploitation of this collateral. Remortgaging might become an attractive option if the collateral value of a property has increased, with a proportion of the mortgage debt subsequently invested in shares. In addition, special mortgage products – e.g., investment-based mortgages – have turned homeowners into shareholders at the same time.

Closer consideration of household wealth management: survey findings
The previous section provided a macroeconomic perspective on the composition and development of Dutch households’ joint wealth. A survey is a prime tool for gathering detailed information on various groups of households and their asset breakdowns, motives for holding various asset and liability categories and financial behaviour. The Nederlandsche Bank therefore commissioned Dutch market research institute nipo to carry out a wealth management survey of around 1,200 households representative of the total Dutch population of 6.8 million households. nipo conducted its survey in early March 2002, and in this section we will analyse the findings on wealth management for a number of income groups, discussing such issues as assets, debts and motives for holding various asset and debt classes. Income groups (low/medium/high) have been chosen in such a way that each category comprises some 2-2.5 million Dutch households.2

Assets
Dutch households on the whole show little spread in their wealth across various financial products, with survey findings revealing that they tend to hold their assets in less than four different ways – mostly in current and savings accounts and in their owner-occupied properties. Not surprisingly, the higher the household income and family wealth, the more extensive the wealth portfolio and the more active its management (Table 2). All respondents have current accounts, but the number of accounts and their total balance increase as households’ financial positions improve. Similarly, other financial products – e.g., savings accounts, company savings schemes, single-premium and annuity policies – are also found to be more prevalent, more numerous and to involve higher average amounts further up the income scale. In the highest income brackets, single-premium and annuity policies are found roughly three times as often as in the lowest band, for instance. For that matter, over half of the low-income group indicate they do not know why they had bought single-premium or annuity products, while those in the higher income brackets were very clear about saving for – possibly early – retirement and, to a lesser degree, factoring in the tax treatment of these types of savings. Other financial products were kept in case of unexpectedly large expenses (e.g., savings deposits, so-called share-leasing schemes and options) or future university expenses of children (insurance-linked savings scheme). Investing in equities and bonds tends to occur primarily among high-income households, with those investing in individual stocks generally doing so for the fun of it. More often than not, investors holding individual equities take a more active approach than do those investing through mutual funds, as the average number of changes over the past twelve months shows: 6.2 versus 3.6. Not that portfolios are always made up of many different stocks: half of individual-stock investors own shares in no more than two different companies, with the number averaging 4.5 for this group as a whole and only one in seven investors holding ten or more individual names in their portfolios.

When share ownership is broken down by age, a convex shape emerges: people in their forties are the keenest investors, while both younger and older age groups tend to hold relatively fewer equities. Other countries have found similar breakdowns. That said, the proportion of assets invested in equities does rise with age, reflecting the greater importance attached to current income and wealth – which usually increase with age – in constructing wealth portfolios than to
income expectations (theoretically higher for the younger age groups, who one would therefore surmise to have a greater proportion of their assets invested in riskier asset classes).

Active management
When asked about their motives for keeping their money in specific asset categories, lower-income households frequently reported salting away for major and/or unexpected expenses, whereas those in the higher income brackets firmly focused on their incomes – or those of their children – later in life. Lower-income groups would also seem to be less conscious or less active in terms of wealth management, recording the highest ‘don’t know/no answer’ scores for nearly all questions. That the large majority (83%) of this group seek no financial planning advice whatsoever and in fact feel no need for such advice corroborates this picture of a less active approach to wealth management. In the other income groups, half of those surveyed do look for advice, mostly turning to professional consultants and sometimes to family and friends. Over three-quarters have an intermediary they always use, and at the top of the income range (i.e., gross annual household incomes equalling or exceeding EUR 68,000) one in five has consulted a notary public – a phenomenon not really seen in the other income groups. Again, three-quarters of those in the highest income bracket have made wills, compared with 40% of the population at large and 25% of low-income households. In constructing their wealth portfolios – for those to whom this applies – these higher-income respondents cite pension provision as their key consideration, with risk-spreading and expected returns coming second and tax motives following.

Non-mortgage debts
Across all income groups roughly one-quarter of respondents report having a standard credit facility, a personal loan or both. At the low-income end such

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**Table 2 Assets and liabilities**
Number of households owning specific assets and liabilities, number of assets and liabilities, average value

<table>
<thead>
<tr>
<th>Asset/ liability</th>
<th>Ownership asset (percentages)</th>
<th>Average number</th>
<th>Average value (EUR thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>Current account</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Savings account</td>
<td>65</td>
<td>74</td>
<td>84</td>
</tr>
<tr>
<td>Company savings scheme</td>
<td>20</td>
<td>63</td>
<td>75</td>
</tr>
<tr>
<td>Annuity policy</td>
<td>7</td>
<td>30</td>
<td>39</td>
</tr>
<tr>
<td>Single-premium policy</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Insurance-linked savings scheme</td>
<td>13</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Mutual fund</td>
<td>9</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Individual shares</td>
<td>3</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Individual bonds</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Options</td>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Share leasing</td>
<td>4</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Non-mortgage loans</td>
<td>28</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Credit cards</td>
<td>27</td>
<td>85</td>
<td>78</td>
</tr>
<tr>
<td>Hire purchase</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Home ownership</td>
<td>18</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td>Mortgage on owner-occupied property</td>
<td>98</td>
<td>87</td>
<td>95</td>
</tr>
</tbody>
</table>

Explanatory note: With more answers possible, the sum of the percentages may exceed 100; I = low income bracket, M = medium income bracket, H = high income bracket, T = total population.

credit facilities are primarily used to finance major and/or unexpected expenses, whereas high-income households tend to draw on credit to buy durable consumer goods. By contrast, their low-income counterparts opt relatively often for hire purchase – mostly for household appliances such as washing machines or television sets, less so for cars or personal computers. Reasons cited for hire purchase include special offers (52%) or a temporary cash shortage (39%). As for credit card usage, 33% of lower-income-bracket cardholders list such financial motives as the ease of borrowing, twice the figure for the other income groups, whose prime consideration is convenient payment abroad. Incidentally, by far the most important reason for using a credit card mentioned by all groups is its sheer convenience.

Summary
Low-income groups tend to keep their assets in fewer different categories. They manage their resources by being alert to unexpectedly major expenses so as to be able to make ends meet and prevent financial problems. Higher-income families tend to prioritise their wishes in terms of pension provision, to consult with experts if they so desire and to manage a proportion of their money for the sheer pleasure of it.

Home ownership
How do the Dutch live?
Over half of Dutch households (52%) now own the property they live in. When asked what made them decide to buy rather than rent, homeowners report a dislike of being dependent on a landlord and enjoying the freedom of being able to do exactly what they wish to their homes. In this context, consumption – e.g., the pleasure of independent living – obviously counts for more than the investment element. In addition, over half report that buying works out cheaper for them than would renting, with tax benefits playing a key role. Lastly, buying is seen as an asset-building investment. A large proportion of tenants, by contrast, cite convenience, flexibility and lack of financial worry as grounds for renting a property, while one in four finds renting cheaper – particularly those qualifying for rent subsidies. Quite a significant group of tenants would nonetheless like to buy, but cannot afford to do so or have as yet been unable to find a property to their liking. It is particularly striking that a large number of both tenants and buyers indicate that the way they live is cheapest for them. Those in the lowest income brackets often indicate they are better off renting because of rent subsidies, while higher-income families frequently cite favourable tax treatment as a reason for buying their homes. All this suggests that government housing policies have a major impact on the way the Dutch choose to live.

Mortgages
Of those surveyed, 95% report having financed the purchase of their homes – at least partially – through a mortgage. The average mortgage uptake currently totals €106,000 per property, exactly matching Netherlands Statistics’ and the Dutch land registry office’s figures, and taking total mortgage debt to over €300 billion. As the survey reveals, straight-line and annuity mortgages – involving debt repayment during the mortgage term – account for only 9% of this total, while the massive popularity of other types of mortgages – which leave actual debt unchanged during the term of the mortgage – is attributable to the greater advantages of exploiting mortgage interest tax allowance. Interest-only mortgages account for over 40% of the total mortgage debt, savings-based mortgages for 30% and mortgages based on life insurance and investment of securities for 19%.

Of those households that bought their homes in the late 1990s, the majority have taken out mortgages exceeding the purchase price of the property (i.e. with a loan-to-value of more than 100%). Although the survey was not designed to analyse long time series, the data do make it possible to relate the percentage of ‘maximum-value mortgages’ to the time at which they were entered into (Chart 3). The numbers indicate that such maximum-value mortgages have come to account

Chart 3  Maximum-value mortgages
Per cent

<table>
<thead>
<tr>
<th>Period</th>
<th>00-01</th>
<th>01-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>71-75</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>76-80</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>81-85</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>86-90</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>91-95</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>96-00</td>
<td>35</td>
<td>80</td>
</tr>
<tr>
<td>01-02</td>
<td>40</td>
<td>90</td>
</tr>
</tbody>
</table>
for a significantly higher proportion of the total mortgage uptake: whereas people used to be required to at least partially dip into their own resources when buying a home, these days it has become common practice to borrow a little more to pay for such additional costs as property transfer tax, notary public and land registry fees, etc. The rise in the number of maximum-value mortgages are an indication that banks have eased up on their lending conditions. Interestingly, the late 1970s similarly recorded a surge in maximum-value mortgages on the back of a relaxation in borrowing conditions. In an international context the Netherlands is indeed looking at a high mortgage debt to purchase price ratio. Tax treatment is again an important explanation here: mortgage interest relief makes borrowing relatively cheap. Granted, this relief has been available for many years, but homeowners in the Netherlands have been particularly keen on exploiting tax opportunities since the 1990s.

**Home equity release**

With house prices having surged, most homeowners in the Netherlands are looking at massively higher levels of equity in their homes: mortgages now average €106,000 compared with average market prices of €193,000, according to land registry office figures. Incidentally, the survey found homeowners to be rather more optimistic about the price of their properties than the land registry office (Table 2), with well over a third saying they had released at least some of the equity in their homes in the last six years, getting out on average €31,000 – generally less than half of the equity available. One in seven report having completely or almost completely released the equity tied up in their homes. In relative terms, lower-income families tend to release the equity in their properties more often than do higher-income groups and are also more likely to use the proceeds to pay off other debt and buy household appliances, as opposed to spending the money on major purchases such as cars. That said, most of the equity thus released tends to get spent on the property itself – and this applies to all income groups.

Judging by survey findings, the amount borrowed through home equity release since 1996 totals some €33 billion, with €28 billion actually spent (e.g., on home improvement, consumer durables, holidays). In 1999 and 2000, in particular, a great deal of consumer spending was paid for out of funds released in this way (€6.8 billion and €9.9 billion respectively, compared with €4.5 billion in 2001 – see Chart 4). This finding fits in with the fact that residential property price increases peaked at 20% per annum in those years. The overhaul of the Dutch tax system may also have something to do with these figures: with effect from 2001, homeowners have to be able to show receipts proving that they have used equity thus released for home improvement – that is, if they are to qualify for mortgage interest relief on their remortgaged properties.

`morkmon`, the Nederlandsche Bank’s macroeconomic structural model for the Netherlands, makes it possible to chart the impact on economic growth of such additional spending, revealing a positive 1 percentage point addition to gdp volume growth in 1999 and 2000 including indirect effects (Table 3). Note that this figure might overstate matters: even if alternative funding had been required, a proportion of this amount might still have been spent. Released equity-related spending halved in 2001 and turned into a negative contributor to gdp volume growth, bringing it down by half a percentage point according to our simulation. With labour markets displaying a delayed reaction to falling production growth and wage and price trends stubbornly persistent, pay increases and inflation still recorded more significant upturns – of 0.5% and 0.3% respectively – than they would have done without this boost to spending.
For many households, pension arrangements are among the most important – if not simply the most important – force driving their wealth management, financial conditions allowing of course. Massive amounts tied up in annuity and single-premium policies bear testimony to this, though it should be noted that many of these contracts were not entered into because the Dutch wish to add to their pensions after age 65, but because many of them are hoping to retire early. Some 50% of those surveyed have given this option serious thought, with just one-quarter planning to stop working at 65 – the statutory pensionable age for all Dutch citizens – and three-quarters wishing to retire at 62 at the very latest. Among this latter group, two ages are particularly popular as cut-off points: 60 (29%) and 55 (10%). When asked how they plan to bridge the financial gap to age 65, they report expecting to receive on average some €31,000 in annual income, half of this from annuity policies and a quarter through pre-pension or early-retirement arrangements. Respondents who have not yet reached age 65 but who have already stopped working report receiving an annual average of €22,000, three-quarters of which derives from pre-pension or early-retirement schemes as against only a modest amount in annuity payments (Chart 5). These figures clearly illustrate how the Dutch have only recently started to top up their pensions by taking out annuity policies – a trend encouraged by the surge in share prices until 2000 and active marketing by providers referring to the tax benefits of their products. The same pattern emerges when respondents are asked about – expected – sources of income after age 65. The majority cite the statutory old-age pension (AOW) as their key source of income, accounting for an average 60% of total income for those already retired while those who have yet to turn 65 project this percentage at nearly 50%. In both groups, former employers are expected to chip in around 30% to pensions. Concern over the future of the statutory old-age pension is widespread: a large group of respondents feels it will no longer exist in its current form by the time they reach the age of 65. Some 50% of this group foresee comparatively lower pension payments and/or payment at a later age. Incidentally, one-quarter of those surveyed in the 65-plus age group depend on the statutory pension for 90% or more of their incomes, while only 3% of the under-65s expect this to be the case for them when their time comes.

Overall, then, the survey found that not many of the Dutch expect to keep working until they are 65 and that most are counting on increased prosperity to help them realise their wishes financially. Ironically enough, prosperity and the popularity of annuity and single-premium policies – promoted as a means to boost pension provisions – are combining to frustrate the government’s policy of encouraging older workers to stay in the labour force.

### Table 3: Impact of home equity release on spending

<table>
<thead>
<tr>
<th>Effect</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic spending (€ billion)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumptions relative to baseline scenario</td>
<td>3.1</td>
<td>6.8</td>
<td>9.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Domestic spending obtained through simulation results</td>
<td>1.0</td>
<td>2.0</td>
<td>2.2</td>
<td>-1.1</td>
</tr>
<tr>
<td>Of which: direct spending boost from equity release</td>
<td>0.6</td>
<td>1.0</td>
<td>0.7</td>
<td>-1.4</td>
</tr>
<tr>
<td>Volume growth goods and services imports</td>
<td>0.7</td>
<td>1.4</td>
<td>1.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>Volume growth GDP</td>
<td>0.5</td>
<td>1.0</td>
<td>1.1</td>
<td>-0.5</td>
</tr>
<tr>
<td>Growth wage cost per employee</td>
<td>0.1</td>
<td>0.2</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Employment growth (enterprises)</td>
<td>0.1</td>
<td>0.3</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

1 To arrive at a solid estimate of the impact in 1998, the analysis has factored in a spending boost from home equity release of €1.2 billion in 1996 and €0.9 billion in 1997.
Summary and conclusions

Key findings include:
1 Dutch families have seen their joint net household wealth jump to a goodly 8 times annual disposable household income on the back of steep increases in residential property and share prices in the 1990s (compared with 4.5-5 times in the late 1980s).
2 Lower-income groups tend to manage their resources on the basis of being alert to unexpectedly major expenses so as to be able to make ends meet and head off financial trouble. Higher-income families have more financial leverage to prioritise their wishes in terms of pension provision, to consult with experts if they so desire and to manage a proportion of their assets for the sheer fun of it.
3 Household participation in the equity markets has risen sharply, both in terms of individual shares owned and indirect shareholdings through mutual funds and other financial products.
4 Increased participation in the equity markets and steady growth in home ownership have combined with surging price increases in both equity and property markets to rack up these asset classes’ share of household wealth – and the sensitivity of Dutch families’ and the general economy’s asset balances to market trends has increased accordingly.
5 Just how important the price trend in the property market has been is evident from the fact that one-third of Dutch homeowners have released a proportion of their home equity in the past six years totalling an estimated EUR 33 billion, of which some 85% has actually been spent.
6 2000 was a bumper year: EUR 10 billion was spent from home equity-released resources. In 2001 this figure fell by more than half to EUR 4.5 billion. MORKMON-based calculations capturing this trend’s impact on the Dutch economy show GDP volume growth to have received a 1 percentage point boost in 2000 and to have taken a 0.5 percentage point hit in the following year. With labour markets, pay trends and price developments showing their usual delayed reaction, both wages and inflation still recorded significant increases.
7 Survey-based calculations find maximum-value mortgages (LTV over 100%) to account for an ever-increasing proportion of mortgage totals in the 1990s, confirming the easing of borrowing conditions.
8 A large proportion of people in work plan to retire well before the statutory pensionable age of 65. Of those who have given issue this serious thought (about half), three-quarters say they wish to retire before 65 – often at age 60 or 55 – and expect to bridge the gap until they reach pensionable age by drawing on annuity and single-premium policies, pre-pension schemes or other accumulated assets. This wish to retire early, and the opportunities people now have to actually achieve this ambition, are detrimental to government policies aimed at encouraging older workers to stay in the workforce.
9 Dutch households generally show a high level of concern over the country’s statutory old-age pension (AOW). Over half of respondents believe the pensionable age will be raised before they turn 65 and/or foresee relatively lower AOW payments than are common today. At the same time, the majority of respondents still expect AOW to account for over half their total household income when they retire.

1 For an international comparison of household wealth, see OECD Economic Outlook, 70 (December 2001), Statistical Annex.
4 The full research report (W 687/Meb Series Nr. 2002-8) Vermogensbeheer Nederlandse gezinnen: analyse op basis van een enquête is available (in Dutch) and can be downloaded from the Nederlandsche Bank’s website (www.dnb.nl).
5 Demarcation lines between the three income groups have been drawn at gross household incomes of €7 35,000 and €7 45,000 respectively.
6 For previous research into home equity-released spending, see ‘Survey among Dutch mortgage-holders on the use of mortgage credit’ Quarterly Bulletin (June 2000), pp. 31-43.
In April 2001, in the context of the public debate about tariffs charged for the use of payment instruments and the way the payment infrastructure in the Netherlands functioned, the Minister of Finance asked the President of the Nederlandsche Bank to lead an investigation into tariff structures and infrastructure in retail non-cash payments for individual and business users.

A working group was established chaired by the President of the Nederlandsche Bank and including the chairmen of the boards of seven banks, the president of Interpay and the chairman and the director of the Dutch Bankers’ Association. Given the societal importance of payment systems, the working group held periodic consultations with representatives of both business and private payment service users. In March 2002, the working group concluded its activities and laid down its findings in a report, Tariff structures and infrastructure in Dutch mass payments. On the basis of this analysis, the Nederlandsche Bank recommended a number of improvements. The report and the recommendations were presented to the Minister of Finance, who endorsed the recommendations and submitted both documents to Parliament on 24 April 2002. This article discusses the conclusions of the report and elaborates on the Nederlandsche Bank’s recommendations.
The Dutch payments market

Having efficient, reliable and innovative payment systems is crucially important for any modern market economy. How important this is, is illustrated by the fact that in 2001, an estimated 3.2 billion non-cash payments were made in the Netherlands, totalling over €73,500 billion in value. The total costs involved in processing these payments are considerable as well. Although estimates of these costs are surrounded by large uncertainties, international research papers estimate them at 1% to 3% of GDP. After a brief discussion of the organisation of the payments market, this section will give a more detailed description of point-of-sale (POS) payment products market and the ‘remote’ payment products market.

The organisation of the payments market

Some 70 banks in the Netherlands offer checking accounts, which are used for making non-cash payments. It should be noted, however, that the market is very highly concentrated. In numbers of checking accounts and of payments, the largest four banks have a joint market share of some 85%. The total number of checking accounts in the Netherlands is about 22 million – 20 million held by consumers and 2 million by businesses and government. The bulk of payment transactions consists of transfers from personal to business checking accounts. In a large number of cases, such transfers involve two different banks. An important role in handling these interbank transfers is played by Interpay, which is jointly owned by nine banks. Interpay provides a system of agreements and technological standards which ensure the safe, prompt and reliable processing of non-cash payments between banks in the Netherlands. Additional services by Interpay include the calculation of the net amounts owed between banks as a result of retail payments (clearing) and submitting the related payment instructions to the Nederlandsche Bank, which will effect payment of the balances of the interbank payment flows between current accounts held by the bank (settlement). The shared infrastructure provided by Interpay has resulted in considerable increases in efficiency, because the large numbers of payments processed allowed optimum benefits of scale to be realised while processing times could be reduced.

Settlement services set aside, the Bank performs no operational tasks on behalf of retail payments. To ensure a reliable payment environment, it exercises prudential supervision of credit institutions and ‘over-sight’ of payment systems. Under the Act on the supervision of the Credit System of 1992 (ascs), providing checking accounts is restricted to institutions registered with the Bank. Registration obliges institutions to meet several requirements relating to prudential business management. The responsibility of oversight is primarily to ensure the safety, reliability, continuity and efficiency of payment systems and products. Supervision and oversight are essential guarantees ensuring confidence in institutions involved in creating and managing money, and confidence in the safety of distribution channels and payment instruments.

The POS payment products market

Market results

POS transactions are made in cash, by debit card, by electronic purse (prepaid card) or by credit card, the first two being by far the most prominent, both in numbers of transactions and in total value (Table 1). Over the past decade, the number of electronic POS payments has boomed from 20 million in 1991 to 954 million in 2001, taking market share away from especially cheque payments, where numbers fell from 290 million to 5 million in the same period. Given the continued advance of the number of electronic payments, the current trend is a progressive substitution of cash by electronic payments.

Interpay plays an important part in processing electronic POS payments, first, as the agent responsible for transporting the information required for authorisation of each transaction by the banks. Secondly, it manages the eftPOS terminal network. The network links retailers’ terminals to the banks’ computers, allowing every card holder to pay at any terminal. The network currently links 165,000 eftPOS terminals, while consumers hold 20 million debit cards. And thirdly, Interpay also does the clearing of interbank positions resulting from electronic payments, it provides payment information to the banks and it is responsible for submitting the settlement instructions to the Nederlandsche Bank, which effects the final settlements.

As regards the currency supply, the Bank, together with the other national central banks in the euro area, holds the monopoly on the issue of banknotes. This task also includes checking returned banknotes for genuineness and fitness. The Bank also manages the coin circulation. Banks play a facilitating role in the distribution of banknotes and coins, by physically circulating them and receiving them back. An ever growing part of the distribution takes place via automatic teller machines (ATMs). Here again, Interpay plays a role in
cash withdrawals from atm's owned by banks other than the one where the checking account is held (‘hosting’), in that it provides the link between the system of the dispensing bank and that of the account holder’s bank. Yet most clients withdraw money from their own bank’s atm’s, and there, Interpay is not involved.

Tariff structure
For consumers, there are no transaction charges for domestic pos payments and atm withdrawals. In most cases, therefore, the cost of using pos payment products will be limited to an annual charge for the use of debit and/or credit cards. There are, however, hidden expenses in the form of opportunity interest costs, because banks pay very low or zero interest rates on checking balances; because of differences in booking and interest-bearing dates (value dating); and because of differences between dates of incoming and outgoing bookings (float). Business customers also encounter hidden costs, although in many cases they are able to negotiate interest payments on their checking accounts. With respect to visible costs, business customers do find themselves paying more than consumers for the pos payment services they use. For the data transportation involved in eft-pos payments, Interpay will charge per-transaction tariffs graduated according to annual transaction volume. In addition, businesses pay for the purchase and servicing of eft-pos terminals, while subscription and telecommunication costs also come into play. Cash payment, on the other hand, also carries considerable costs for business users, of as much as 0.5% to 1% of cash sales. Here, one should think of internal costs and the costs charged by banks for depositing and withdrawing cash balances.

International comparison
Large differences between countries exist in the use of payment products for pos transactions. Unlike in the Netherlands, for instance, cheques are still widely used in such countries as the United States, the United Kingdom, Australia and France. A pervasive similarity, however, is that most payments are still made in cash everywhere. Another similarity is the strong increase in electronic payments, progressively replacing cash payments in all countries. Taking a closer look at the way electronic payment systems are organised, one may observe strong differences. In Belgium, the situation is similar to that in the Netherlands, with Banksys performing much the same role and function as Interpay. Essentially different systems are found in other countries, the most interesting examples in this respect being Germany and Australia. In Germany, some 25 network providers offer eft-pos payment services. Another remarkable fact is that there are variants of debit cards without payment guarantee. Therefore, German retailers have a greater choice of systems than Dutch retailers. In Australia, the processing of eft-pos payments is strongly decentralised. In contrast to the Netherlands, Australia does not have a central switch, but electronic pos payments are routed through bilateral links between banks’ networks, requiring an elaborate system of bilateral interchange fees.

A comparison between tariffs of debit card payments shows that in our country, they tend to be lower than elsewhere (Table 2). In none of the countries considered except Australia is the consumer charged directly for using eft-pos services. Retailers in the Netherlands pay charges similar to those in Belgium and the United Kingdom, but lower than those in the

---

**Table 1**

<table>
<thead>
<tr>
<th>Payment product</th>
<th>Number</th>
<th>Value</th>
<th>Average transaction amount (eur)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>84.0</td>
<td>52.7</td>
<td>10</td>
</tr>
<tr>
<td>Electronic purse</td>
<td>0.5</td>
<td>0.1</td>
<td>3.50</td>
</tr>
<tr>
<td>Debit card</td>
<td>14.5</td>
<td>41.7</td>
<td>46</td>
</tr>
<tr>
<td>Credit card</td>
<td>0.9</td>
<td>5.2</td>
<td>91</td>
</tr>
<tr>
<td>Euro cheque / giro cheques</td>
<td>0.1</td>
<td>0.3</td>
<td>77</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>16</td>
</tr>
</tbody>
</table>

1. The Bank’s own calculations.
2. Withdrawn as of 1 January 2002.
other countries in the comparison. The average transaction charge in Italy and France, 0.9%, implies that in those countries, payments of €8 and up carry higher charges than they do here. In Germany, too, average eft-pos charges clearly exceed those in the Netherlands, indicating that more competition in debit card infrastructure does not automatically result in lower tariffs.

Tariff structures

Private users do not pay transaction-based fees on incoming or outgoing remote payments, except for certain special payment products such as express payments. Given the hidden costs referred to above, however, i.e. interest losses as a result of low or zero interest rates on checking account balances, value dating and ‘float’, the use of payment products by private users is free only in name. For the business segment, by contrast, an elaborate and diversified system of transaction charges is in place. Tariff differences between different payment products broadly correspond with their relative efficiency, although the height of the tariffs is a matter of negotiation between the business user and his bank, so that actual charges depend on the entire package of financial services used by business clients.

International comparison

The Netherlands is a typical giro country – as are, for instance, Germany, Belgium and the Scandinavian countries – characterised by a relatively large proportion of credit transfers and direct debits in total payments, and only a small proportion of cheques. Examples of typical cheque countries are the United States, the United Kingdom, Canada and France. The differences are usually historical in origin or caused by specific national circumstances, such as French legislation, which prohibits the levying of tariffs on the use of cheques. An international comparison of tariff structures, moreover, reveals that consumers in other countries do not pay charges on incoming payments either. Outgoing consumer payments, however, do carry charges in many countries, with the result that for Dutch consumers, direct costs of remote payments are low by comparison. The Dutch situation in this respect is fairly similar to that in Belgium and the UK. Tariffs for business users are to a reasonable extent in line with

### Table 2 pin transaction fees

<table>
<thead>
<tr>
<th></th>
<th>Private users</th>
<th>Business users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>0</td>
<td>0.07</td>
</tr>
<tr>
<td>Australia</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Belgium</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0.9%</td>
</tr>
<tr>
<td>Germany</td>
<td>0</td>
<td>0.3%</td>
</tr>
<tr>
<td>Italy</td>
<td>0</td>
<td>0.9%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0</td>
<td>0.08</td>
</tr>
</tbody>
</table>

1. Average charges as of 1 July 2001.
2. An extra fee of €0.20 per pin transaction is owed to the network provider. Tariff relates to the debit card with payment guarantee (€t Karte).

The remote payment products market

Market results

The most prominent remote payment products in use by consumers are the (single) credit transfer order, inpayment transfer and direct debit. Businesses mostly use batch transfers, for e.g. salary payments, and direct debits, for the periodic collection of, e.g., telephone and energy bills. As is the case with pos payments, most transactions require the involvement of two banks, so that cooperation between banks, as on standardisation, is a necessary precondition for efficient processing of payments. Agreements on common standards and publicity campaigns have led to a dramatic increase in the number of orders capable of automatic processing over the past decade. Whereas in 1990, some 50% of all non-cash payment orders were still hand-written, that share had come down to 12% by last year (Chart 1).

Chart 1 Development in use of media 1991 – 2001

<table>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper-based</td>
<td>100</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Electronic</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Private users do not pay transaction-based fees on incoming or outgoing remote payments, except for certain special payment products such as express pay-
those abroad. Interesting with respect to the batch transfer order, an important payment product for business users, is that it is less expensive in the Netherlands than in the other countries considered.

**Issues and recommendations**

The above discussion leads to the conclusion that the Netherlands has an efficiently organised payment system. Nevertheless, the Nederlandsche Bank is of the opinion that certain elements of the payments market could do with improvement, notably with respect to the role and position of Interpay, the tariff structure and the guarantees protecting the public interest.

*The role and position of Interpay*

As a provider of network and transportation services for the authorisation of debit card payments, Interpay takes up a key position in processing electronic payments. Whereas Interpay competes with other banks and non-banks, such as credit card companies, in many of its activities, it is the sole provider of the network and transportation services mentioned above on the Dutch payments market. The fact that Interpay is the single available contract party for business users has been the subject of debate, in which retailers’ criticism of the tariffs charged by Interpay and of its authority to set them has been especially severe.

Interpay has in recent years reduced its tariffs for debit card transactions by robust margins, partly given the strong growth in the number of debit card transactions. In real terms, the tariff reduction over the 1996-2001 period came out at 30% to 50%, depending on the telecommunications channels used. In addition, Interpay announced in the summer of 2000 that further cuts will be made if the number of debit card transactions continues to rise. In this context, a retroactive reduction by 7% was applied to all debit card transactions made in 2001, while over the coming years, depending on volume developments, further cuts of up to 20% will be made. With respect to the transportation services offered by Interpay it may be said that they have become profitable and that initial losses have been compensated. Due to the special position Interpay occupies in the Dutch payments system, the tariffs it charges deserve special attention. It falls to the Netherlands Competition Authority (NMa) to judge whether Interpay charges unfair tariffs. Another element in an assessment under competition law of Interpay’s position will be whether it otherwise imposes unfair conditions, which might for instance impede the entry of other network service providers into the market.

As for the changes to terminal specifications, these are in many cases the result of international agreements intended to guarantee safety and reliability. Changes are generally decided in joint consultation by Interpay, banks and terminal suppliers, while additional functionality demanded by retailers may also result in changes to terminals. The debate on the terminals’ specifications are illustrative of the fact that communication between Interpay and the retailers is not what it could and should be. Differences of opinion between providers and users of payment services primarily concern the products offered by Interpay and the banks for POS payments. Therefore, the Bank has recommended that users of payment services be involved on a more structural basis in Interpay’s policy making, through the creation of an advisory group on debit and prepaid card use. In order to enable suppliers and users to enter into a constructive dialogue with each other, the parties involved should make additional agreements on the status, mandate and operation of the advisory group — which, given its role as the overseer of payment systems, should not include representatives of the Bank. The supply of more elaborate information in Interpay’s external reports would also benefit the transparency of its policy, as would expansion of its supervisory board to include independent experts, which would have the added benefit of improving Interpay’s corporate governance.

In its researches, the Working Group observed a lack of clarity about the division of labour between Interpay and the banks where debit card use is concerned. The banks provide the actual payment product (verification of balances/unused credit margins; extending payment guarantees; administration and processing of authorised transactions; and the dispatch of account statements), whereas Interpay plays a facilitating role in providing the necessary data transportation. The confusion is increased by the fact that retailers are charged a fee by Interpay for transportation services rendered, that Interpay acts as a contract partner, while the banks do not charge retailers directly for using the debit card payment product. According to the Bank, it would be desirable, in order to encourage greater transparency, if the banks, as the actual suppliers, became the retailers’ single counterparty with regard to the entire debit card payment product. Therefore the Bank has recommended to transfer the contracting of debit card service agreements from Interpay to the banks. Users may then consider the debit card services in relation to other banking services and decide which bank offers them the best.
value for their money. The networking and transportation services to be purchased by the banks would then be equal in status to other external purchases of goods and services. Market conditions could improve, meanwhile, if other suppliers besides Interpay entered the market for the involved networking services. Given the huge investment which would be needed, however, the construction of a full-fledged duplicate network would not seem the logical solution. A more likely scenario would be for third parties to purchase capacity on the existing network. The Bank advocates a freer operation of market forces and more competition, provided they benefit the efficiency of payment systems from a societal point of view. In this context, the Bank’s oversight of payment systems will consider whether current parties use unnecessary (e.g. technological) impediments to new accessors.

**Tariff structures**

The effectiveness of the payments market requires that tariff structures contain sufficient incentives to encourage the efficient use of payment products. The current tariff structure for consumers merits special attention in this context, since transaction-linked tariffs are almost an unknown phenomenon there. For the business segment, by contrast, an elaborate and diversified system of transaction charges is in place. The consumer cost of using payment products is largely unrelated to the actual use of payment services, consisting as it does of opportunity costs as a result of low or zero interest rates on checking account balances. However, the Working Group found that even so, consumers are already using payment products efficiently. To a large extent, this is the result of publicity campaigns to encourage the use of, for instance, direct debits, which effectively stressed ease of use and safety aspects. Another factor have been market incentives such as price cuts for customers who agree to extend such mandates. The Bank, therefore, sees no urgent reason to replace the current tariff structure for consumers by one based solely on transaction-based charges. However, the Bank does favour a greater range of choice for consumers, such as businesses already have. This would increase cost awareness among consumers and hence the efficiency of payment systems. The Bank therefore recommends that banks, as an alternative to the current consumer package, i.e. no transaction-based charges and no interest on checking account balances, introduce a choice of direct transaction charges in combination with higher interest rates on checking account balances.

In order to find the best way to enhance POS payment efficiency, it is important that reliable information about the societal cost of the various POS payment products be made available. The most closely involved parties, i.e. the banks/Interpay, retailers’ federations and the Bank, endorse the importance of this information and have promised to co-operate in a research project. In addition, the Bank will look into possible enhancements in the efficiency of the currency supply, as through optimum co-ordination with the banks of operational processes relating to the issue and return of banknotes and coins.

**Safeguarding the public interest**

An adequate payments market relies on effectively functioning market forces. In this respect, a natural tension between competition and interbank co-operation in setting the necessary standards is in evidence. Although the nature of payment systems makes agreements between banks a necessity, the Bank holds that this should not lead to unnecessary restrictions on competition. In this context it should be noted that the Dutch payments market is already dominated by a limited number of banks and a single interbank processing institution, Interpay. In order to encourage competition, the Bank is prepared to offer settlement accounts in its books to non-banks which play a role in payment processing, if such a measure can contribute to a more efficient payments market. More generally, the Bank is of the opinion that given the oligopolistic structure of the payments market, it is important that there should be sufficient checks and balances in place.

Aspects to be assessed in the context of competition law fall under the competence of the NMa, but the Bank, as the overseer of payment systems, will be able to prevent currently active parties from creating impediments in the shape of, for instance, unnecessary technological standards. The Bank plans to intensify its oversight policy on this score. In line with agreements on the EEC level, more attention will be paid to aspects such as the public efficiency of payment systems and the use of objective and public access criteria.

Apart from the tensions between competition and cooperation, there is another area of tension to be overcome on the way to an efficient payments market: that between cost reduction and accessibility. Ready access to checking accounts is of great importance to consumers, and is hence demanding more and more attention, because accessibility of amenities to certain groups in society, such as the elderly and the physically challenged, has come under pressure as banks reduce numbers of branches and introduce restrictions on, for
instance, over-the-counter services. Various initiatives have been undertaken in order to find solutions to these and related problems. A Commission on the Accessibility of Payment Services, created under the aegis of the Dutch Bankers’ Association, has for instance formulated a common service level and accessibility framework with regard to payment services. Another effort in this context has resulted in the Covenant on primary payment services, stipulating how persons of no fixed abode may open a checking account. The Bank endorses the importance of these initiatives, and proposes, as a contribution to a more structural solution, the creation of a ‘public consulting group on payment services’, consisting of senior management level representatives of the parties involved. Apart from discussing the social aspects of developments in the field of payments, this body could cooperate in collecting and analysing quantitative data related to payments, for instance with respect to the research into the costs of POS payment products. The Bank is prepared to participate in this group, which will report to the Minister of Finance. The current Working Group on the Efficiency of Payment Systems, which has been functioning less than satisfactorily, may then be dissolved.

Conclusion

The Working Group on Tariff Structures and Infrastructure in Dutch Payment Systems has found that the payments market in our country has shown great dynamism, and is characterised by an efficient infrastructure with a relatively large-scale use of computerised and hence inexpensive payment instruments. Private users are almost never faced with transaction-based tariffs, so that for them, payment-related costs are largely unrelated to the actual use they make of payment services. For the business segment, by contrast, an elaborate and diversified system of transaction charges is in place, with the observation that these charges are usually the result of package negotiations between a business and its bank. On balance, tariffs in our country compare favourably with those in other countries, with debit card use generally less expensive than they are elsewhere.

In order to achieve further efficiency improvements in payment systems it would, in the opinion of the bank, be desirable to stimulate market forces by measures including such as will enhance transparency and competition. In this context, it has recommended:

- the introduction by the banks of the possibility for private customers to choose between different tariff structures;
- continued research into the public efficiency of POS payment instruments as a basis for policy aiming at optimum efficiency in the retail payment market;
- the creation of a ‘consulting group on payment services’ as a discussion platform to reach agreement on changes in the payment market and for the structured collection and analysis of information on payments and payment systems;
- contracting for corporate debit card services, including networking services, to the banks;
- the creation within Interpay of a users’ advisory group on the use of debit and prepaid cards;
- improving the transparency of Interpay by having it provide more detailed information in its external reports;
- the inclusion in Interpay’s Supervisory Board of independent experts in order to improve corporate governance.

On its part the Bank will look into possible improvements in the currency supply. In addition, it is prepared to offer settlement accounts to non-banks which play a role in payment processing, if such a move can contribute to a more efficient payments market. Finally, in accordance with agreements in a European context, the Bank will also intensify its oversight of payment systems.

In March 2002, the report by the Working Group on Tariff Structures and Infrastructure in Dutch retail payments was presented, together with the Bank’s recommendations, to the Minister of Finance, who submitted the documents to Parliament on 24 April. The minister has endorsed the recommendations and notified Parliament of his intention to consult with the parties involved in order to realise the recommendations listed above.

1 Companies pursuing the business of issuing electronic money may register as an ‘electronic money institution’. Under the ASCS, such institutions are subject to a reduced supervision regime.
A suggested European agenda for structural reform

Improved use of potential labour supply, more dynamic product markets and further economic integration should hold out opportunities to boost Europe’s growth potential, a comparison with the United States reveals. Its future closely tied in with that of Europe, the Dutch economy stands to gain from any European growth-boosting structural reforms. Key challenges facing the Netherlands itself include tackling the country’s high levels of benefit dependency and associated economic non-activity, and pushing up labour productivity. Across Europe there is widespread agreement on the need for structural reform, as the recent Barcelona summit confirmed. But progress has been slow over the past few years.
How far does the **EU** lag the United States?

In the 1990s as in the 1980s, the United States recorded economic growth well ahead of the figures for Europe, notching up an annual 3.4% in the 1991-2001 period compared with the **EU**’s 2.4%. One notable and persistent difference between the two lies in the extent to which they utilise potential labour supply (Table 1). The difference in labour-force participation emerged in the mid-1970s, amounting to 4.4% in 1980 (i.e. 66.9% in the United States compared with 62.5% in the European Union) and, as Table 1 shows, has been more or less constant since 1990, at around 10.5%. In 2000 the United States recorded higher labour-force participation than the European Union across the board, posted lower jobless numbers and more hours worked per employee. The **EU**’s higher unemployment and fewer older workers in the labour force are easily explained in terms of its institutions: doing little in the way of encouraging people to return to work, **EU** social security systems have proved much less able to cope with economic shocks. In the early 1980s, for instance, the oil shocks brought structurally higher unemployment rates in their wake. In a simultaneous development, the **EU**’s generous social security systems also expedited a redistribution of labour, with early-retirement schemes encouraging older workers to make way for the young jobless – and labour-force participation among older workers has fallen as a result.

In the 1990s the U.S. economy saw the labour supply grow much more rapidly on the back of a rise in the number of hours worked. However, what really catches the eye is the divergence in productivity trends between the United States and the European Union (Chart 1). Just as labour productivity growth in the **EU** was falling off in the late 1990s, in the U.S it kicked ahead. It is generally accepted that this productivity leap lies in with the rise of information and communication technologies. Initially, high productivity growth was only visible in IT goods-producing sectors, but later the phenomenon was found to reach much further and wider: higher productivity growth came on the back of increased capital utilisation (i.e. capital deepening) and improved efficiency in the production process. It took much faster in the United States: in the 1990s U.S capital spending on information technology was higher than in the **EU**, at an average 8.1% of GDP in the 1992-1999 period against 5.6% in Europe (Netherlands: 6.7%). On European Commission estimates, Europe’s economy missed out on 0.5% in annual GDP growth in the period. So are there any lessons to be learned from the U.S lead in information technology?

It is widely believed that the stellar rise of America’s IT sector and the rapid penetration of information technology in the U.S are linked to the way the country’s economy is set up. Two distinguishing features stand out here: more flexible labour markets and more competitive in product markets. America’s flexible labour market offers relatively little protection against dismissal and is therefore marked by high inflows into unemployment, but at the same time also by many new job openings and high outflows from unemployment.

### Table 1 Utilisation of labour-force potential

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Netherlands</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per centages of total employment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour-force participation</td>
<td>72.2</td>
<td>74.1</td>
<td>61.1</td>
</tr>
<tr>
<td>Female workers</td>
<td>64.0</td>
<td>67.9</td>
<td>46.7</td>
</tr>
<tr>
<td>Young workers (15-24)</td>
<td>59.8</td>
<td>59.8</td>
<td>53.0</td>
</tr>
<tr>
<td>Older workers (55-64)</td>
<td>54.0</td>
<td>57.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Part-time (per centages of total employment)</td>
<td>13.8</td>
<td>12.8</td>
<td>28.2</td>
</tr>
<tr>
<td>Jobless numbers (per centages of total labour force)</td>
<td>5.6</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>Average working hours (hrs/yr)</td>
<td>1,807</td>
<td>1,869</td>
<td>1,433</td>
</tr>
</tbody>
</table>

Source: Oecd Employment Outlook 2001
1 Excluding Greece.
2 Excluding self-employed.
3 1999.
These US labour-market dynamics keep the number of those out of work for over a year at around 6% (as a percentage of the jobless total), whereas some European economies are looking at figures in excess of 40%. With labour markets this flexible, US workers more readily adjust to economic shocks and challenges such as the rise of information technology. Steeper competition in product markets also accounts for the US economy's rapid absorption of information technology. As is well known, new entrants cause existing players to reduce their production costs, creating a selection mechanism that eventually results in only the most productive and efficient companies surviving. For the US economy this mechanism seems to have really kicked in during the 1990s, with competition forcing American companies to launch large-scale IT investment programmes and implement efficiency improvements — unhampered by restrictive labour-market regulations.

This comparison between the United States and the European Union should not ignore the fact that the American economy has always had an historic edge: it is around 30% bigger than the EU economy¹ and has long been completely integrated, whereas in some respects the European Union still comprises fifteen separate economies. America’s edge shines through in its larger, more competitive domestic markets, greater labour mobility, and deeper and consequently more efficient capital markets (eg, venture capital). In the European Union markets are still fragmented. True, EU directives are increasingly creating common institutional ground and the birth of the euro has removed exchange risk as a key barrier between markets. But in various sections of the financial markets there is still some way to go, as evidenced by persistent differences between interest rates among other things. The European Commission reckons that this continuing absence of full financial integration is costing the European economy some €43 billion per annum.

A European policy agenda for structural reform

As the differences between the two economic structures reveal, Europe could do much more to unleash its welfare potential. These differences should be seen as obvious items to go on any European agenda for structural reform (see box below). The completion of the internal market, improved utilisation of potential labour supply and increased competition in its product markets should help Europe provide a massive boost to its growth potential. The Netherlands has a significant contribution to make to these last two policy issues, which could help enhance the operation of the European — and therefore its own — economy. By speeding up implementation of necessary reforms to product markets and factor markets, the Netherlands might secure a comparative advantage relative to other European countries. That said, Dutch interests would be even better served if EU member states were to jointly implement reform. After all, Europe is a key market for corporate Holland and the Netherlands has proved an attractive operational base for multinationals wishing to enter the European market.

Completion of the internal market

Completion of the internal market is an essential prerequisite if the gap with the United States is to be bridged. Europe’s economy will not be able to fully exploit its potential until free, mutual access between European product, capital and labour markets is attained. There is no denying that Europe’s economies are growing increasingly closer, as trade flows show. Across all European nations, trade has swollen over the past two decades, and over 60% of total European trade is carried out within the borders of the European

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¹ McGuckin and Van Ark (2001).
Defining structural reform

This article uses a definition of structural reform that takes in the rules of the economic process – ie, the ‘institutions’ in the economic sense of the word. A policy aiming at structural reform (briefly: structural policy) creates the conditions necessary for more efficient operation of product markets – ie, goods and services – and factor markets – labour, capital and knowledge – by reforming regulations. Key objectives are optimum conditions for productivity growth, a reduction in unemployment and an increase in labour-force participation. European Commission and OECD reports define structural reforms along much the same lines.

Structural reform includes privatisation of state-owned companies, regulatory reform and liberalisation of product markets, changes to regulations governing permanent and temporary employment contracts, social security reforms, and revision of regulations governing capital markets and the financial services sector. Not included in the definition of structural policy are investment in the factors of production – eg, infrastructure capital, R&D capital and human capital – or active tax policies. Generally speaking, the emphasis on structural policy reflects a different take on what policy can achieve: the idea of ‘making a society’ has given way to a more modest approach, with the role of government seen as being to create the right conditions and, where necessary, correct market outcomes through regulation. In this sense, structural policy clearly differs from previous – outmoded – government policies which focused on influencing sectors through specific government aid packages and regulation of sector production through quotas, levies and subsidies.

Union. In the Netherlands, this increase shows up most clearly in re-export figures.

Although European integration continues, there is still a need to overcome various barriers between national product markets and factor markets, and to remove distorting factors. One such a distorting factor is state aid: although this has been coming down in the past few years, it is still higher than in the United States. In addition, country-specific certification requirements in commodity markets create impediments to international trade, while mutual recognition of technical standards has been very slow to take off. In business services, obstacles include elaborate licensing requirements that businesses are expected to meet in order to set up shop. Foreign entry into utility sectors such as gas and electricity was unimaginable only a short time ago, although these industries are now very gradually – and at a different pace in different countries – being opened up to foreign competitors. Only in telecommunications has European liberalisation really and truly happened.

Obviously, smaller member states are disproportionately affected by poor access to foreign product markets. Having a small domestic market makes it difficult for companies to achieve the economies of scale needed for efficient production. If liberalisation were speeded up and non-tariff barriers relaxed, the internal market for goods and services could be completed more rapidly and the competitiveness of the European economy would improve.

Unlimited faith in the liberalisation process would be inadvisable, however: deregulation of an industry without there being any prospect of – potential – new entrants is simply a recipe for price increases. In many cases, effective regulations are needed to absorb these types of market failure and to serve the public interest by guaranteeing universal access to essential facilities.

To better utilise labour, the European Union needs to encourage greater labour mobility. The extent to which people follow jobs remains modest despite the fact that there are no formal restrictions on labour movement. For many years now, cross-border labour mobility has been hovering around an annual 0.1% or 0.2% of the population. If this percentage is to go up, the European Union will have to cut down on restrictive regulations and step up financial incentives. Recognition of qualifications earned in other European countries would be one step, while financial incentives could be boosted by offering greater scope for wage differentials and tightening up social-security programmes. For now, however, the fact remains that there is little in the way of labour mobility even between European countries.

Neither is the internal market for capital a done deal, and European capital markets compare dismally with their US counterparts. Capital markets in the United States have much greater depth and are much more liquid, reducing the cost of capital. Such capital costs are unnecessarily high in many fragmented European financial markets, cases in point being venture capital and repo markets, which are hobbled (respectively) by different prospectus requirements and difficulties in cross-border use of collateral. These are obvious areas in which structural reform is called for, as is the har-
monisation of accounting standards, which would facilitate companies’ access to foreign capital markets.

Towards better labour-force utilisation and more dynamic product markets
Completion of the internal market is a necessary – but insufficient – precondition for the EU to catch up with the United States. If potential economic growth is to be lifted to a higher plane, the labour-force participation gap will also need to be closed and the European economy has to become more dynamic. A starting point in tackling the first of these issues is the social-security system, which in many European countries does little to motivate benefit recipients. More often than not, those on benefits hardly gain in net terms if they accept paid jobs. The average time that people spend on benefit in the EU is relatively long in an international context. To achieve the requisite increase in labour-force participation, the age at which older workers leave the workforce also needs to be raised – and for this purpose it is not exactly encouraging that many Europeans consider early retirement virtually an entitlement. Over the next few decades, European countries will increasingly face ageing labour forces, and adjustments will be needed to make it more attractive for older workers to stay on.

Economic non-activity within EU social-security systems cannot be separated from wage setting institutions. Judging by sometimes massive regional differences in unemployment within countries – in Belgium, Germany and Italy, for instance – many member states have inadequate wage differentials in place. Clearly, the inter-regional labour mobility that could help remove these differences is simply not happening. High jobless numbers at the bottom of the pay scale suggest that the lowest wages – the statutory minimum wage or the lowest union-negotiated pay scales – are too high to guarantee entry in the labour force of low-productive workers. In an efficiently-operating labour market, real pay reflects differences in education and training, sectors and regions, and the framework of collective wage bargaining should therefore leave sufficient scope for wage differentials – for instance by allowing such deals to be fleshed out at company level or by providing for regional exceptions and dispensations to deviate from national norms if labour market conditions differ.

If it is to up potential growth, the European economy will have to become rather more dynamic in both its labour and product markets. It faces the challenge of creating an environment conducive to innovation and the entrepreneurial spirit, within firm social parameters. Granted, Europe saw its economy become more flexible in the 1990s, but it is still some way behind the United States. EU countries still have far more stringent labour-market regulations than does the US, even if – with the exception of France – most have seen some improvement in the rules governing temporary and flexible work (Chart 2). A key condition of a dynamic economy, a flexible labour market facilitates adjustment to any shocks. But flexible labour markets are no panacea when it comes to making Europe’s economies more dynamic: there is reason to believe product markets in many EU countries have become over-regulated and unnecessarily rigid. The OECD has developed various indicators to measure the dynamism of product markets and the extent to which they are constrained by regulation, and their most important findings are that continental economies impose far greater institutional restrictions on business than do the Anglo-Saxons (Chart 3). A lot needs to be done to bring various European member states up to speed, such as cutting through all the red tape involved in setting up a new business and reducing the administrative burden on companies, particularly start-ups. Relaxing bankruptcy laws and thereby giving a second chance to entrepreneurs could also help stir in some dynamism. But for people to actually use the additional leeway thus
created, it will take more than simply creating the right conditions. In fact, it will require a change in entrepreneurial culture within the EU, since compared with their American brethren – Europeans tend to be more attached to security. In addition to according greater importance to entrepreneurialism, liberalisation and regulation can also help pave the way for a more dynamic economy. In quite a few countries, product-market deregulation has not brought enough competition in its wake, and the old state-owned monopolies still cast their long shadows over various European network sectors.

**Higher potential growth in the Netherlands**

Within the EU, the Netherlands is one of the few countries that have actually recorded solid growth over the past couple of years, even if much of this was to do with housing-market-related wealth effects which have now run their course. Labour-force participation in the Netherlands has kicked smartly ahead of the European average, and the country is one of few that measures up to the United States in terms of productivity. By way of illustration, if labour productivity per hour worked were set at 100 for the EU as a whole in 2000, the Netherlands would even have topped the United States, coming in at 118.9 to the US’s 118.4. However, the country recorded disappointing labour productivity growth in the 1990s (see Chart 1), and it can easily be taken down a peg or two in terms of its labour-market success: after all these years of growth, it still faces massive economic non-activity. If prosperity is to continue in the next decade or so, the Netherlands will have to increase labour-force participation and bolster labour productivity growth. Of these twin planks, labour productivity will have to be the sturdier – or so calculations by the Dutch Central Planning Bureau suggest – because population ageing rules out any labour-force-driven growth similar to the 1990s and because the Dutch economy is expected to reap greater benefits over the next few years.

Pushing up labour productivity growth is a tough policy objective to achieve, but – as the American experience shows – not an impossible one. Since its influence on market-sector productivity is by definition indirect, the Dutch government will only be able to create the right conditions for companies to be able to operate more efficiently and to innovate. Whatever else, a competitive economy is a *sine qua non*, calling for liberalisation-inspired policies and forceful regulators, while the government would do well to back up its liberalisation policies by encouraging entrepreneurialism. New business entrants offer the best guarantee of a competitive climate, and in this respect the Netherlands, like most other continental European countries, could do with some more entrepreneurial spirit. That said, there is no ignoring the direct responsibility the Dutch government has for increasing labour productivity where it can: in the public sector. For a long time, any organisational changes in the public sector were perforce driven by budgetary controls, causing socially inefficient stimuli to emerge in health care, for one, in addition to massive over-regulation. Gains can no doubt be made here. The rewards of public-sector organisational reform should show up in higher-quality public services as well as in more extensive overall provision of such services.

Raising the labour-force participation of those groups now lagging behind should prove a less thorny task, because labour-force participation directly ties in with labour-market institutions and the set-up of the social-security system. Increasing the participation of women would be a start, inasmuch as their choice not to join the workforce or to opt for part-time work reflects difficulties in combining work and child care. The Netherlands’ long waiting lists for child care and paucity of available child-care places compared with other European countries suggests a bottleneck. Access to the country’s social-security system is the key to
increasing labour-force participation among other groups. From a European perspective, the Netherlands may be looking at relatively low official jobless figures, but much of its economic non-activity is hidden away in other social-security schemes (Chart 4). The reforms of the 1980s and 1990s were a success in terms of financial savings, but much less so in terms of benefits uptake: the social-security ratio has been coming down since the early 1980s, but the inactive-to-active ratio did not embark on its descent until the late 1990s and is expected to move back up over the next few years.

A key cause of the non-activity problem is the virtual lack of incentives to return to the labour market or stay in the workforce – and this is true of social-security schemes for older people, the disabled and others not in work. Attractive early-retirement schemes make it hardly worthwhile for older workers to keep going, while the first years of ill-health and disability – when the chances of reintegration are highest – come with the fewest financial incentives to return to work due to the highest extra-statutory benefits. This state of affairs is reflected in the high replacement rate: a full 100% in the first year of ill health, followed by 90% in the first year an employee is officially recorded ‘incapacitated’, to 74% in the second and 68% in subsequent years. The unemployed and those on social security are caught in a poverty trap: by taking on a job they lose out on all kinds of means-tested benefits and end up with net incomes only marginally higher than or sometimes even below their benefit payments. One important policy avenue is to increase the financial incentive in the country’s many social-security schemes. In addition, to tap into the labour reserve currently on social security or unemployment benefit, there should be fewer exemptions to the obligation to apply for jobs, coupled with much more severe sanctions if efforts to look for work are found to be wanting. Many benefit recipients have been – either formally or de facto – granted such exemptions, ie, over 69% of those covered by the National Social Assistance Act and nearly 30% covered by the Unemployment Benefits Act.

The Lisbon strategy and its slow implementation

The EU’s lag vis-à-vis the United States cannot simply be dismissed by reference to social preferences. As is well established, Europeans seek different social conditions in terms of working hours, social cohesion and sustainable growth from their American cousins, setting greater store by leisure time, as well as being more egalitarian and focused on sustainability. But preferences are an inadequate explanation for the EU trailing the United States: the former’s higher percentage of part-time workers and lower labour-force participation only partially reflect free social choices. What is more, the diverging income trends of the 1990s (Table 2) are much more likely to tie in with performance – ie, a more dynamic US economy – than with preferences. The fact that the Dutch economy has narrowed this income differential by means of labour-driven growth in the same decade suggests that the European Union at large should also be able to bridge at least part of the gap with the United States.

In recognising the need for structural reform, the joint interest shared by all European member states cannot be overemphasised: if the European Union does well in economic terms, so will its individual member states, and vice versa. Such mutual dependence justifies a European growth strategy, for any structural reform boosting a member state’s growth potential will have beneficial effects for other member states. The Lisbon summit in 2000 committed to an acceleration in the pace of reform by agreeing on a European growth strategy alongside existing policy co-ordination procedures, the aim being to make the European Union the world’s most dynamic and competitive knowledge-based economic area by 2010. Key priorities of the Lisbon strategy include strengthening the EU’s innovation and knowledge environment, further integrating its capital and product markets and raising labour-force participation.
The strategy is most specific about this latter priority, setting an employment-rate target at 70% as against 63.6% in 2000; included in this objective are employment-rate targets of 60% for women and 50% for older workers. Its basic parameters include sustainable economic growth, quality of employment and strong social cohesion. Strategy progress is reviewed at each annual spring summit, the first of these being in Stockholm last year followed by another earlier this year in Barcelona.

Having the Lisbon strategy in place is undoubtedly useful, as peer pressure among European member states should encourage swifter adjustments and increased learning through information exchange (ie, of best practices), thus doing full justice to the subsidiarity principle. As it stands, the Lisbon strategy basically adds value to national policies and should therefore contribute to a smoothly operating European economy. Two years after its launch, however, real-world progress is disappointing: improvement on some points, but pretty slow overall. Despite favourable economic conditions – and labour-market reforms implemented by member states – employment added a mere 0.7% between the March Lisbon and Barcelona summits. If the 2010 objectives are to be met, labour-force participation will have to be bumped up – and fast. The Commission’s Financial Services Action Plan (fsap), launched specifically to speed up financial integration in the European Union, is paying off, but key directives such as the one governing corporate takeovers have yet to be adopted and it will take a tremendous effort to complete the action plan by its 2005 deadline. The timeframes agreed on product-market liberalisation are way in the future – if indeed agreements on opening markets have actually been made – and the proposed introduction of European patent law has foundered altogether. As the European Commission noted, a ‘delivery gap’ now exists between EU promises and real reforms.

These modest achievements are in stark contrast with the widely perceived importance of structural reform. A key problem here is the decision-making process: before directives on a more efficiently operating internal market are agreed, a whole series of political hurdles need to be overcome. Once the European political process has run its course, member states are often very slow to incorporate European directives into national laws, either for domestic political reasons or in a bid to protect the interests of ‘their own’ companies. Smoother policy-making requires greater single-mindedness at community level, prioritising problems, imposing strict deadlines on the realisation of directives and adequate monitoring by the Commission of the implementation of directives by member states. More than this, it will depend on both the European Parliament and EU member states displaying a co-operative spirit. Achieving the goals of the Lisbon strategy will be impossible without the full cooperation of the European Parliament in drawing up directives and member states in enacting such directives into national legislation. Europe’s economic woes are widely known, and what matters now is that they are tackled through real policy change. Target figures and actions plans should be met by way of the implementation of new European directives and country-specific structural reforms.

Explanatory note: Figures have been adjusted for exchange rate changes.
Source: Eurostat.

### Table 2 gdp per capita
Index us = 100

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<td>Germany</td>
<td>74</td>
<td>68</td>
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<td>67</td>
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<tr>
<td>United Kingdom</td>
<td>65</td>
<td>70</td>
<td>100</td>
<td>100</td>
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<tr>
<td>France</td>
<td>76</td>
<td>65</td>
<td>70</td>
<td>65</td>
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<tr>
<td>Italy</td>
<td>73</td>
<td>67</td>
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<tr>
<td>Netherlands</td>
<td>72</td>
<td>75</td>
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<tr>
<td>Spain</td>
<td>54</td>
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<tr>
<td>Japan</td>
<td>84</td>
<td>71</td>
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</tbody>
</table>

Explanatory note: Figures have been adjusted for exchange rate changes.
Source: Eurostat.
1 The Netherlands’ position looks somewhat better than it actually is. In terms of people in work, labour-force participation may be well ahead of the European average, but in terms of fte’s it is scarcely higher than average. No other European economy has so many part-time workers.

2 At current exchange rates.

3 A look at trade figures alone underestimates the true extent of ‘Europeanisation’, as this also occurs through foreign direct investment (fdi).

4 At 82% in the Netherlands, 80% in Germany and 79% in France, the relationship between benefits and wages (ie, the replacement rate) is significantly higher than the US’s 59%. Note that these comparative figures refer to 1997, with benefit payments scaled down a little in most European countries since.
Regulatory Impact Analysis as new instrument for the Bank

The increased complexity of the financial sector and its regulation has highlighted the need for devising effective and efficient regulation. Parallel to this, the need for transparency and accountability is also growing. A well-structured regulatory process, including consultation with the parties concerned, such as the financial institutions involved, not only meets this need but can also relieve the administrative burden on the sector. Leveraging this effect, the Bank carried out a study into the added value resulting from the use of Regulatory Impact Analysis as an in-built part of the regulatory process. This policy instrument addresses the effects of proposed regulation, including the qualitative and quantitative costs and benefits to financial institutions. The Bank recently decided to implement this instrument and use it in areas where it can be beneficially applied to immediate effect. This article describes the backgrounds, objectives and main features of the new instrument, which is intended to support policy and regulatory development.
Introduction

Many developments, such as the ongoing globalisation, financial innovations and sophisticated risk management techniques, contribute to the growing complexity of the financial sector. They go hand-in-hand with an increased need in society for confidence in the financial system (including the fight against financial crime) and for transparency in the products of this sector. These developments significantly affect the nature and scope of the regulatory processes aimed at guaranteeing the soundness and integrity of the financial sector. It follows that attention should focus increasingly on effective and efficient regulation. This attention is in response to a cultural change in society, namely the increased self-awareness of financial institutions and their clients. The call for accountability regarding the manner in which regulators and policy makers go about their statutory tasks is becoming louder. At the initiative of the previous cabinet, for instance, an advisory committee (Adviescollege toetsing administratieve lasten, referred to as Actal) was put in place in order to assess the burden resulting from all departmental rules and regulations. Its aim is the systematic and consistent curtailment of administrative burdens.

Effective regulation presupposes a thorough analysis of the various issues involved. Regulatory Impact Analysis (RIA) provides support in this context. Viewed from a broad perspective, RIA structures the whole regulatory cycle. Specifically, it addresses the effects of proposed formal or informal regulation, such as the costs and benefits to financial institutions and any other parties involved. Making RIA part of the regulatory cycle is in line with the recommendations to legislative bodies laid down in the OeCDE guidelines on the development of better regulation.

In Anglo-Saxon countries, Regulatory Impact Assessments are already being carried out before regulation enters into force. In the United Kingdom, for instance, a so-called Regulatory Impact Assessment is required for all major initiatives and in the financial sector, by law the Financial Services Authority must carry out similar exercises. In countries such as Canada, the United States and Australia, too, the application of Regulatory Impact Analysis is of well-established importance.

Regulatory Impact Analysis

Regulation is one of the most important instruments at the Bank’s disposal to help it achieve the objectives arising out of its tasks. These tasks include the supervision of financial institutions and the promotion of the proper operation of the funds transfer system. Regulation involves costs and benefits for the institutions to which it applies. The public, too, may be affected. In view of the range of interests and diversity of the parties affected by regulation, careful decision-making is essential.

As an instrument of assessment, the function of RIA is to support regulatory decision-making. In terms of content, it charts the relevant issues involved in a regulatory question. In addition to the Regulatory Impact Assessment in which it results, RIA can be used as a means of communication.

An RIA covers all aspects of relevance to regulatory decision-making. In addition to strict costs and benefits expressed in monetary terms, it looks at qualitative issues as well. Moreover, if necessary, the analysis also takes into account the broader interests of the economy and society. Table 1 reflects the possible contents of a finalised Regulatory Impact Assessment.

Application of Regulatory Impact Analysis

The prior (ex ante) application of RIA may cover the analysis of regulatory initiatives that are at a very advanced stage of development or, in a broader context, serve to support the entire regulatory cycle. This cycle begins with a problem and risk analysis. A start is then made on policy development and on the preparations for framing the regulation. This phase also covers the investigation into possible alternative regulatory options. Once regulation has entered into force, it can be evaluated to examine, among other things, to what extent the intended objectives are being accomplished. This type of evaluation is a backward-looking (ex post) application of RIA. A backward-looking analysis can result in revising existing regulation.

An RIA can be performed in varying degrees of detail, output ranging from a general to a very detailed opinion. As with insurance, where the objective is to cover risks, here the risk of inappropriate regulation must be reduced. Two dimensions give an indication of the appropriate degree of detail: the probability of an event and the impact or severity of such an event should it occur. An event is defined as the probability of an intended regulation turning out to be inappropriate. Figure 1 illustrates the appropriate amount of detail for...
The assessed RIA models 1 - 4 represent an ascending degree of detail or intensity, as the case may be.

The level of detail needed for assessment of the two extreme cases, low probability / low impact (1) and high probability / high impact (4), is quite evident. Determining the level of detail needed for an assessment is hardest when the probability of an event occurring is low but its impact is high. The danger of this probability-impact combination is to be found in what is known as disaster myopia, a situation in which the risk is completely overlooked. The safest approach in this case is to err on the side of cautious and opt for a relatively significant degree of detail.

The costs of an RIA are similar to an insurance premium in that they minimise exposure to the risk of avoidable losses. Occurrence of the event is not completely excluded. Nor may the conclusion be drawn in retrospect that the costs would not have been required if the event failed to occur.

Methods and techniques

The RIA methods and techniques mostly consist of the common examination methods of inquiry, including desk research, the analysis of bank data which the Bank already has, such as balance sheet items, and interviews and surveys. Another method is the dissection of a complex problem into constituents that are manageable and transparent, or factor analysis. Even at the development stage of regulation, it is important to take into account the subsequent enforcement and compliance aspects of the regulation concerned. Compliance analysis can be a useful tool in this respect. A number of factors are crucial in securing compliance with a regulation, including the understanding of the regulation on the part of financial institutions, the cost to them of complying with the regulation, the complexity of the regulation and its enforcement mechanisms, and the extent to which the measure is system-friendly and fits in with existing banking systems.

Table 1 Overview of Regulatory Impact Assessment content

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Objective and intended effect</td>
<td>Identifies what the intended measure is intended to do and how it will do it.</td>
</tr>
<tr>
<td>Risks</td>
<td>Reflects the risks that prompted the intended measure in the present situation.</td>
</tr>
<tr>
<td>Benefits</td>
<td>Identifies the benefits of the intended measure, seen also from a broader perspective (in terms of quality and where possible quantity).</td>
</tr>
<tr>
<td>Costs</td>
<td>Identifies the costs of the intended measure, seen also from a broader perspective (in terms of quality and where possible quantity).</td>
</tr>
<tr>
<td>Enforcement</td>
<td>Puts into perspective the possibilities and implications of the intended measure from the compliance and enforcement angles.</td>
</tr>
<tr>
<td>Feasibility</td>
<td>Gives an estimate of the probability of the intended measure securing the desired effects. Criteria need to be set in order to measure this.</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Surveys the various possible regulatory and non-regulatory solutions available to resolve the issues under consideration and provides a brief summary of the implications.</td>
</tr>
<tr>
<td>Consultation</td>
<td>Shows who has been consulted and how the outcome of the consultations has been dealt with.</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Provides a summary and, considering the overall opinion, makes a recommendation on the intended measure to decision-makers.</td>
</tr>
<tr>
<td>Other relevant matters</td>
<td>These relate to key findings that came to light during the RIA and that were not addressed in the opinion, because they were not directly linked to the subject matter of the investigation.</td>
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</tbody>
</table>

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Each case. The assessed RIA models 1 - 4 represent an ascending degree of detail or intensity, as the case may be.

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Characteristics of an effective application of RfA

When applying forward-looking RfA, the added value is greatest in the initial phase of the regulatory cycle when options may still be open, and the analyses and outcome as reflected in an (initial) Regulatory Impact Assessment can affect the design of the regulation.

Consulting the parties involved is conducive to enhancing the quality of the intended regulation and may be required at several points in time. In addition to the supervised institutions, the parties involved should include groups affected either directly or indirectly by the intended regulation, such as consumer organisations. Consultation gives them the opportunity to contribute their knowledge and throw a different light on the issue concerned. Moreover, purposeful exchanges with such parties will increase the chances of a positive reception and backing of the intended regulation. Understanding and involvement at the development stage of the regulation will promote compliance once the regulation becomes effective.

The preparation for the consultation process largely determines its quality and effectiveness. RfA offers support in this respect by offering structure and transparency (Table 1) to both the consulting and the consulted party (RfA as a communication instrument). To enable the outcome of the consultation process to be incorporated into the final design of the intended regulation, such consultations should ideally be held well before the Regulatory Impact Assessment has been finalised. Even a rudimentary version of the Assessment addressing the background to the current situation as well as the objectives and intended effects, can serve as a basis for initial discussions. As and when the analysis progresses, refinements can be made, and points may emerge requiring further attention or investigation. The need for consultation may again arise at this point. In this way, the feasibility of the means of achieving the intended effects and the difficulties facing the regulator and the consulted parties can be discussed in a structured manner.

Both quantitative and qualitative aspects are of importance when analysing the pros and cons of regulation. A sound argumentation of the qualitative benefits can be much more informative and convincing in some cases than poorly supported quantitative estimates would be. Since benefits are often difficult to quantify, a bias may arise against the measure, since regulations usually involve costs, such as the expenses of the supervisor and the cost to the institutions of meeting the obligations arising from regulation. In addition, regulation can result in unintended costs owing to unintended side effects, such as less diversity in financial services or a competitive disadvantage for domestic banks, that prevents a level international playing field.

RfA benefits

As a rule, the persons designing financial regulation and measures are still not sufficiently involved with ensuring their effect and efficiency. While a perfect grasp of the consequences will only be found in ideal circumstances, the current situation can be significantly improved. The structured streamlining of both regulatory content and process, which includes communication with the financial sector, can substantially boost consistency and hence the quality of both decision-making and regulation. The uncertainty surrounding the impact of the regulation on the financial sector and consumers can be lessened by a systematic approach.

The application of RfA yields numerous benefits. As mentioned earlier, the discipline inherent in RfA facilitates the systematic management of the regulatory cycle, so that unpredictable and unforeseen aspects, too, come to light. The systematic charting of the impact, the pros and cons of regulations offers greater added value than ad hoc research. A uniform methodology and an unambiguous regulatory process are key in ensuring a disciplined and systematic approach. And it is precisely these aspects that are conducive to the consistency of both the research preceding regulation as well as of the regulation itself. The methodology ensures that a broad spectrum of relevant costs and potential benefits affecting regulation are taken into consideration by the regulatory authority. The risk that regulation is based on too narrow a compilation of criteria or needless intuition is accordingly limited.

With a systematic approach to the regulatory process, the Bank also responds to the call for accountability by regulatory authorities. RfA offers the Bank an instrument showing that it is making prudent use of its regulatory powers. Consultation with market parties or supervised institutions will contribute to the socially responsible implementation of its tasks. Thus the systematic approach not only improves the quality of the intended regulation, but also increases the acceptance among the supervised institutions.

RfA costs

RfA involves costs as well as benefits, since it requires the input of people, and therefore utilises resources and takes up time. The regulatory or policy-making process can slow down as a result. Another danger is that the analysis is performed in unnecessary detail.
By integrating ria into the regulatory cycle, these costs are kept to a minimum. When weighing up the costs and benefits, the latter would appear to outweigh the former (see also the following paragraph), the more so when the significant and avoidable enforcement costs associated typically with regulation of lesser quality are taken into consideration. These include economic costs to the financial sector and consumers.

Regulatory Impact Analysis within the Bank

In order to survey the possibilities of ria in support of the Bank’s policy and regulatory processes, a project was started under the auspices of the Supervision Directorate in mid-2001. The objective of this project, which now has been completed, was the design and development of a prototype ria methodology for this directorate.

The project consisted of three phases. The first phase entailed a theoretical survey of the possibilities and techniques of ria, notably for the regulation of supervision. In the second phase, the theory of ria was tested in two pilot studies of existing regulation, one being country risk policy. The pilot studies’ objective was to test the usefulness of rias; the studies were not to be regarded as definitive assessments or a model for future Regulatory Impact Assessments. The pilot studies addressed the methodology issue. The design and development of the prototype methodology was then finalised and the overall report drawn up. Subject to these qualifications, the Box gives an impression of the results achieved.

Based on the experience acquired during the two pilot studies, ria proved to be a valuable methodology. The structure that it introduces enhances understanding of the subject matter, enabling the core aspects and sensitivities of the subject under analysis, for instance, to be more quickly and accurately determined.

The regulation the Bank promulgates is very diverse. A case in point is the entirely new regulation being developed at present in the field of integrity, such as the supervision of trusts. At the same time, work is being done, among other things, on the revision of country risk policy. The implications of the new Basel Capital Accord are of importance in this respect.

In order for the ria instrument to be applicable throughout the Bank and to allow for the diversity of regulation, three basic requirements were stipulated for development of the methodology:
1. It should be flexible and purposeful;
2. It should be documented in a manual that stimulates thinking rather than acting as a straight jacket;
3. Policy officials should be able to apply ria using skills and techniques currently available.

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Box Résumé of pilot study on country risk policy

**Background**

The former country risk policy dated back to the 1980s and was a product of the then prevailing debt crisis in Eastern Europe and Latin America. The policy consisted of minimum provision requirements, was mostly backward-looking and left very little room for banks themselves to assume responsibility. The crisis in South America in the mid 1990s led to the revision of the country risk policy. It was driven by the need for a forward-looking approach to risk and for greater responsibility of banks themselves, so that the policy would link up with their internal banking system. The revision is taking place in a number of phases. The current (revised) policy regulation entered into force on 31 December 2000. Some of its key features are that provisioning requirements have been replaced in part by capital adequacy requirements, it is forward-looking, bandwidths apply to capital adequacy requirements and the responsibility has been shifted to the banks.

**Analysis**

The pilot study was carried out ex post, using mostly data available at the Bank. Both internal and external interviews were held, to which two major banks and one small bank lent their co-operation. Both the costs and benefits to banks, supervisor and consumers (bearing in mind the possibility of the costs or benefits being passed on to clients) of implementing the new policy were addressed. Other aspects considered were the extent to which the intended objectives had been achieved, and the extent to which the regulation was neutral and fair vis-à-vis all the financial institutions involved.

**Findings and recommendations**

The new policy requires all banks with assets abroad to have an internal country risk management system in place. ria showed the policy is in line with the bank’s own trend towards more quality-oriented supervision. It highlighted that one way of improving the regulatory process is to increase the involvement of smaller banks, in particular in the consultation process.
Where do we go from here?

Based on the above pilot studies, the Bank concluded that the benefits of RIA outweigh the drawbacks referred to. The Bank sees added value in RIA, and will in future be applying this instrument as an integrated part of the regulatory process throughout the Bank. When embedded in the regulatory process, RIA supports policy and regulatory decision-making as well as can be expected, and provides both scope and time to consider suitable policy alternatives, and to analyse potential problems in more detail. Embedding RIA as an integral part of the regulatory process will reduce its costs to a minimum and prevent it from becoming an extra burden, or indeed mere procedural extension when used separately from the regulatory process or at the end of it.

The Bank is currently making a survey of the areas in which this instrument can be used effectively. The implementation of the instrument is in its initial phase and is helping the Bank to shape the process of awareness raising it is going through. The regulatory framework currently being developed for the supervision of trusts is the first application of this system. It will then be refined through use.
The Dutch economy in 2002-2004:

* a forecast using Morkmon

*Under the influence of a growing world economy, the Dutch economy should grow considerably in the second half of this year. Over the full year 2002, economic growth will be only 0.7%. As in 2001, this is less than in previous years. The main causes of the low annual figure are the negligible spillover effects from 2001 and disappointing consumer spending and business investment. The economic recovery, started during 2002, should continue robustly in 2003 and 2004, giving growth figures of 2.1% and 2.8% respectively. Inflation as measured by the consumer price index is forecast to remain on the high side this year, although at a substantially lower level than in 2001. It is expected to be 3.4% in 2002, coming down to 2.6% in 2003 and 2.2% in 2004. This article pays separate attention to spillover effects as a cause of the low rate of economic growth in 2002 and to two scenario analyses. The first scenario considers encouragement of labour supply; the second the consequences of higher domestic spending in the form of private consumption and business investment. The projections and scenarios were generated by Morkmon, the Nederlandsche Bank’s macroeconometric structural model for the Netherlands*
Introduction

This article presents a forecast for the Dutch economy in the 2002-2004 period, based on assumptions as at 17 May 2002. A forecast for the Netherlands is presented every six months on the basis of calculations using morkmon, the Nederlandsche Bank’s macroeconomic structural model. The Dutch economy did not grow during the first quarter of this year. GDP volume growth is expected to come out at 0.7% for the full year 2002. This figure is of the same order as the previous forecast for 2002 published officially by the Nederlandsche Bank (which was 0.8%, see Quarterly Bulletin, December 2001). 2002 should see the start of a recovery from the economic downturn which began in mid-2001 and it should continue in 2003 when economic growth should be 2.1%. These positive trends continue into 2004 taking GDP growth to 2.8%. The cause of this favourable development lies in the recovery in the world economy following the sharp slowdown in growth in the past year. The Dutch economy is benefitting from this, albeit with a lag.

Inflation projections have been adjusted upwards in this forecast compared with the previous one. Inflation as measured by the increase in the consumer price index (CPI) is expected to be 3.4% this year and 2.6% next year. This is much higher for both years than projected in the previous forecast which envisaged inflation at 2.6% in 2002 and 1.5% in 2003. In 2004, inflation should drop further to 2.2%. There are a number of causes of the high level of inflation. One of these is the strong rise in labour costs. High prices for imported raw materials, other than energy, and the oil price are also contributing to high inflation. In addition, the introduction of euro notes and coins is having an effect on inflation in 2002, estimated at 0.2 to 0.4 percentage points. Unemployment goes up in this forecast. The unemployment figure is expected to be 196,000 this year and 248,000 in 2003. The rise in unemployment is expected to level off in 2004 as a result of strong economic growth.

This article consists of the following elements. The assumptions underlying the projections are discussed in the Assumptions for 2002-2004 section. The baseline projection based on these assumptions is described in the Baseline projection results 2002-2004 section. The legacy of 2001: negligible GDP spillover section then addresses the causes of the poor economic growth in 2002. The Scenario analysis section considers two scenarios under different conditions. The first scenario looks at the relationship between the supply of labour, wage trends, economic growth and inflation. Long-term policy aimed at moderate pay rises and stimuli to participation in the labour market has favourable consequences in terms of economic growth and inflation. The second scenario considers a more positive trend in domestic spending. This scenario, based on a (rapid) increase in private consumption and business investment, is very plausible. The simulation in this scenario provides an insight into the sensitivity of Dutch economic growth to these elements of spending. The article ends with a number of conclusions.

Assumptions for 2002-2004

Underlying this baseline projection are relevant external factors influencing the Dutch economy, based on the assumptions adopted by the European System of Central Banks (ESCB) for 2002-2004 under the recent Broad Macroeconomic Projection Exercise (BMPE). Table 1 sets out the main assumptions. In keeping with common practice within the ESCB, the assumptions are predicated on policy interest rates and exchange rates in place at the time of forecasting and so the projections do not reflect a view on interest rates or exchange rates. The assumptions vis-à-vis long-term rates are fed by technical projections.

World trade pertinent to the Netherlands should improve more strongly in 2002 than in 2001 with expected growth of 3.0% in 2002. In 2003 and 2004, world trade should see above average growth of 6.5% and 6.6% respectively. This year, the United States should recover from the economic downturn it suffered last year. The world trade forecast predicts that economic growth in the United States will be 2.2% this year. This is almost double the 1.2% economic growth of the past year. In 2003, economic growth in the United States should increase further to 2.7%. The economies of most other key industrialised countries outside the euro area should also recover during the second half of this year with the process continuing in the following years. An exception is the Japanese economy which will shrink again this year, but it should see positive economic growth in 2003 and 2004.

Futures prices suggest that oil prices will rise from USD 24.40 a barrel in 2001 to USD 24.60 a barrel in 2002, followed by declines in 2003 and 2004 to USD 23.60 and USD 22.30 a barrel respectively. There are a number of causes for the rise in oil prices this year. The recovery in the world economy is increasing the demand for oil. In addition, the price of oil has been pushed up by the unrest in the Middle East. Finally, a number of coun-
tries (Iraq, Russia, Venezuela) will be exporting less oil or have announced plans to cut exports (Libya and Syria). The expected fall in the oil price in 2003 and 2004 could be associated with market players expecting that the price-raising effect of the conflicts in the Middle East will decline over time. Like the oil price, other commodity prices have been based on futures prices. The recovery in the world economy should increase demand for these other raw materials, prompting a rise in other commodity prices. This year these prices are forecast to rise by 6.6%, next year by 7.0% and in 2004 by 5.6%. The euro should appreciate during 2002 and 2003. In 2001 and 2002, the euro exchange rate will average 90 dollar cents, while it should be 1 dollar cent higher on average in 2003 and 2004. This will make imports into the euro area of products priced in dollars slightly cheaper. Prices of oil and other commodities will, therefore, rise a little less fast in euros than in dollars.

Domestic assumptions relate primarily to budgetary policies and other public-sector areas. No assumptions have been made with respect to discretionary government measures. New measures are not yet known, following the recent election and the on-going government coalition talks.

Baseline projection results 2002-2004

Table 2 shows the actual figures for 2001 and projections for 2002-2004 of the main macroeconomic variables. The focus is on economic growth, its determinants and trends in employment, wages and prices during the projection period.

Economic growth trends

The Dutch economy, as measured by GDP volume, is expected to grow by 0.7% in 2002, which is 0.4 percentage points lower than growth in the previous year. This projection is underpinned by a quarter-on-quarter growth figure of around nil for the first quarter of 2002 which means that the Dutch economy has had three consecutive quarters of no growth. The associated

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Table 1 Assumptions

<table>
<thead>
<tr>
<th>Actual</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2002</td>
</tr>
<tr>
<td>Percentage changes</td>
<td></td>
</tr>
<tr>
<td>Relevant world trade (in volume terms)</td>
<td>1.8</td>
</tr>
<tr>
<td>Goods import prices, in euro</td>
<td>0.7</td>
</tr>
<tr>
<td>Commodity prices ex-oil, in dollars</td>
<td>2.0</td>
</tr>
<tr>
<td>Export prices competitors, in dollar</td>
<td>0.8</td>
</tr>
<tr>
<td>Short-term interest rate - euro area</td>
<td>4.3</td>
</tr>
<tr>
<td>Average levels</td>
<td></td>
</tr>
<tr>
<td>Long-term interest rate - the Netherlands</td>
<td>5.0</td>
</tr>
<tr>
<td>Euro exchange rate (in USD)</td>
<td>0.90</td>
</tr>
<tr>
<td>Oil price (UK Brent in USD)</td>
<td>24.4</td>
</tr>
<tr>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>Public sector employment (x 1,000 fte)</td>
<td>752</td>
</tr>
<tr>
<td>Government consumption (%-volume changes)</td>
<td>3.3</td>
</tr>
<tr>
<td>Government gross fixed investment (%-volume changes)</td>
<td>5.1</td>
</tr>
</tbody>
</table>

1 The source for the international assumptions is the IMF of the ECB (spring 2002).
2 Geographically weighted; goods excluding oil and gas.
spillover effects mean that it is now impossible for the annual figure for 2002 to be higher than that for 2001. At the end of this section there is an extensive review of the role of spillover effects on annual economic growth. The low level of economic growth in 2001 and 2002 is largely associated with modest domestic spending which has fallen because the release of surplus equity in owner-occupied housing, linked with the boom in the housing market and associated higher house prices, has passed its peak. Calculations based on a survey (see the article ‘Spotlight on household wealth management in the Netherlands’ elsewhere in this Quarterly Bulletin) suggest that this trimmed economic growth by 0.5 percentage points last year. Assuming that the release of surplus equity is similar in 2002 to that last year, a downward effect on economic growth of roughly 0.5 percentage points can again be expected as a result of the effect of the lower equity release. The accumulated effect on economic growth of depressed domestic spending this year and last is thus 1 percentage point.

Table 2  Key indicators of the baseline projection

<table>
<thead>
<tr>
<th>Demand and production (volume)</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private consumption</td>
<td>1.2</td>
<td>1.5</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Gross business investment (exc. housing)</td>
<td>-1.1</td>
<td>-1.5</td>
<td>1.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>0.9</td>
<td>1.3</td>
<td>3.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>0.8</td>
<td>1.3</td>
<td>3.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>1.1</td>
<td>0.7</td>
<td>2.1</td>
<td>2.8</td>
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</table>

<table>
<thead>
<tr>
<th>Wages and prices</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiated wage rates per employee in the market sector</td>
<td>4.1</td>
<td>3.6</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Total wage cost per employee in the market sector</td>
<td>4.0</td>
<td>5.0</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>4.5</td>
<td>3.4</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Price competitiveness¹</td>
<td>-0.8</td>
<td>-0.7</td>
<td>-0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Price level of GDP</td>
<td>4.8</td>
<td>3.7</td>
<td>2.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Real disposable wage income per employee²</td>
<td>6.5</td>
<td>0.3</td>
<td>0.1</td>
<td>0.0</td>
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</table>

<table>
<thead>
<tr>
<th>Labour market</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Employment (fte)</td>
<td>1.8</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Labour supply (persons)</td>
<td>1.5</td>
<td>1.0</td>
<td>1.0</td>
<td>0.9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Public sector</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General government balance (% of GDP)</td>
<td>0.2</td>
<td>-0.1</td>
<td>-0.7</td>
<td>-0.4</td>
</tr>
<tr>
<td>Gross debt (year-end, % of GDP)</td>
<td>52.9</td>
<td>50.8</td>
<td>49.2</td>
<td>47.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account (transactions basis, % of GDP)</td>
<td>5.7</td>
<td>5.7</td>
<td>6.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Labour-to-income ratio (percentage)³</td>
<td>84.1</td>
<td>84.4</td>
<td>83.5</td>
<td>82.2</td>
</tr>
<tr>
<td>Capacity utilisation (percentage)</td>
<td>84.6</td>
<td>83.2</td>
<td>82.9</td>
<td>83.3</td>
</tr>
</tbody>
</table>

¹ Change in competitors’ export prices less change in goods export prices (excluding energy).
² Wage drift excluded.
³ Market sector excluding mineral production and real estate operations.
On the other hand, given favourable developments in the United States, the economy in the Netherlands should pick up again in the course of the second half of this year. Consequently, quarterly growth in the economy in the third and fourth quarters is projected at 0.9% and 0.6% respectively. The recovery should then proceed robustly in 2003 and eventually, in 2004, growth will be above average. The economy should grow by 2.1% in 2003 and by 2.8% in 2004.

Growth in 2002-2004 will be based mainly on private consumption and exports of goods and services. Private consumption should rise by 1.5% in 2002, 2.0% in 2003 and 2.4% in 2004 and exports should increase by 1.3% in 2002, 3.8% in 2003 and 5.1% in 2004. In 2002, overall government expenditure will rise by 1.9% and thus also contribute to economic growth. Business investment should also expand again in 2003 and 2004, by 1.4% and 2.9% respectively, after shrinking in 2001 and 2002.

This year, private consumption is projected to increase more than last year. Originally, it was expected that private consumption would pick up rapidly in 2001 because of the large overall tax cut of some €4 bil-

lion for households that year. Households have, however, directed the major improvement in their purchasing power into additional saving. Low growth in private consumption in 2001 was probably caused in part by households anticipating the increase in the standard consumption in 2001 was probably caused in part by households anticipating the increase in the standard rate of VAT from 17.5% to 19% in 2001 which caused some consumption of consumer durables to take place at the end of 2000. Subsequent calculations have indicated that private consumption was 0.3% higher in 2000, and the growth in private consumption in 2001 was 0.6% lower, as a result of this shift. A second cause was most likely the effect on consumption, referred to above, of evaporating wealth-effects caused by house prices increasing more slowly than previously and the sharply lower returns on the stock market compared with previous years.

Business investment fell in 2001 by 1.1% and should fall slightly more sharply still this year, by 1.5%. It should recover in 2003 and 2004, growing by 1.4% and 2.9% respectively. The situation in 2001 and 2002 is a result of the downward economic trend and deteriorating corporate earnings positions. Corporate earnings have been under pressure in recent years because of high wages and ‘labour hoarding’ (retention of staff at times when it would be possible to do with fewer employees). Last year, companies kept people on the payroll while facing an apparently temporary economic downturn. The main reason for this was that the costs of making temporarily surplus people redundant do not outweigh the costs of recruiting and training new staff. The number of vacancies has fallen in the recent past. Some surplus staff have probably been, or are being, made redundant by now, as reflected in the increasing jobless numbers in early 2002. All of this has ensured that companies are hesitating before incurring capital expenditure. The utilisation of capital good stocks fell in this period. Capital expenditure should increase again, however, as the economy picks up in 2003 and 2004.

The increase in export volumes of goods and services was relatively low last year at 0.9%. The higher international demand for Dutch goods and services should create a small rise in export volumes this year, putting annual growth at 1.3%. Thereafter, with the recovery in the world economy, it should rise further to 3.8% in 2003 and 5.1% in 2004. As a result of the deterioration in its international price competitiveness, exports from the Netherlands will grow more slowly than the expansion in world trade volume pertinent to the country and so the Netherlands will lose market share in export markets. The price competitiveness of the Netherlands will not improve until 2004, the year when unit wage costs have been contained to a significant extent.

Growth in the volume of imports should follow the same pattern as that for exports. This is normal in an open economy such as that of the Netherlands. Many imports are goods simply for re-export after some processing in the Netherlands. Last year, growth in imports was 0.9%. This year it should rise to 1.3%, followed by further growth to almost 3% in 2004. Another factor determining the import of goods is the trend in domestic sales. As noted above, this will not pick up sharply until 2003 and 2004.

Wages

Union-negotiated wage rates rose less this year than last year (3.6% versus 4.1%), but this is still relatively high in comparison with earlier years. It is expected that union-negotiated wage rates will decline further over the next few years, to about 2% in 2004, partly as a result of rising unemployment and falling inflation. The labour/income ratio is also falling, in line with the decline in real union-negotiated wage rates and the rise in labour productivity. Although this ratio should rise from 84.1% to 84.4% between 2001 and 2002, a decline, to 82.2%, will set in during 2004.

Table 3 breaks down unit wage costs into their constituent components and shows that the increase in the total wage cost per employee in the market sector is 5.0% in 2002, 1 percentage point higher than in 2001.
Thereafter, the rise in wage costs should fall to 3.6% in 2003 and 2.8% in 2004. 2001 saw the grossing up of the premium transfer allowance which meant a one-off rise of 1.7 percentage points in the contribution of wage drift while, at the same time, there was a one-off fall of 1.7 percentage points in the contribution of employers' social security contributions. Employers' social security contributions should rise over the 2002-2004 period by 0.7% in 2002, 0.5% in 2003 and 0.3% in 2004 mainly because of a rise in pension contributions resulting from disappointing investment results at pension funds. Consequently, social security contributions represent a declining proportion of wage costs per employee in the 2002-2004 period. Wage drift is also highest in 2002 with a slackening labour market being responsible for smaller bonuses and similar items in subsequent years. The decline in the contribution of wage drift in 2003 and 2004 compared with 2002 thus reflects less tension in the labour market. Labour productivity fell in 2001 as a result of the cyclical downturn and possibly because of the retention of surplus staff in the market sector. Labour productivity should rise slightly in 2002 by 0.2%, increasing in 2003 and 2004 to 1.9% and 2.3% respectively as the economy grows further. The combination of a slower rise in wage costs as a result of the reduction in wage drift (one-off items and pension contributions) and improving labour productivity make for a sharp decline in the increase in unit wage costs. The forecast increase in unit wage costs of 0.9% in 2004 represents a very sharp fall compared with the rates of increase in 2001 (5.1%) and 2002 (4.8%).

**Employment**

As a result of weak economic growth and the strong rise in unit wage costs in 2001 and 2002, growth in employment is slowing and unemployment rising. This is occurring with a lag as companies normally hold on to their employees for a while when there is a temporary downturn. This may now be happening to a greater extent given the tightness in the labour market. The labour market will also react with a lag to the revival in economic growth in mid-2002 and improved sales opportunities for companies. The growth in employment should slow from 1.8% in 2001 to 0.4% in 2002 and 2003, only picking up again in 2004, to 0.7%. Partly as a result of the downturn in the economy, growth in the supply of labour will slow down further from 1.5% in 2001 to about 1% in 2002-2004. The Scenario analysis looks at the effects of the low supply of labour in greater detail. Employment growth does not match growth in the supply of labour, resulting in an increase in unemployment figures in 2002 to 2004. Average registered unemployment was only 146,000 in 2001 but will rise in 2002 and later years for the first time since 1994. Registered unemployment is forecast to increase in 2002 by 50,000 to 196,000 with another rise in 2003 to 248,000, followed by a further increase, albeit more slowly, in 2004 to 264,000. Along with the rising unemployment figures, the ratio of economically inactive to active persons, dubbed the i/a ratio, will also go up. This ratio was 65.2% in 2001 but should increase by almost one percentage point in 2002 to 66.1%, rising further to 67.3% in 2003 and it is expected to reach 68.3% in 2004. This is a little above the level in 1999 (68.0%).

**Prices**

The GDP price deflator last year was 4.8% and is expected to be 3.7% this year. It should decline further in 2003 to 2.7%, and come out at 2.1% in 2004. The GDP price deflator should be higher than consumer price inflation in 2001-2003, but is expected to be below it in 2004. The turn-around is the result of an improvement

### Table 3  Breakdown of market sector unit wage costs

<table>
<thead>
<tr>
<th>Contributions in percentage points</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiated wage rates</td>
<td>4.1</td>
<td>3.6</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Wage drift</td>
<td>2.3</td>
<td>0.7</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Employers’ social security contr.</td>
<td>-2.4</td>
<td>0.7</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Total wage costs per employee</td>
<td>4.0</td>
<td>5.0</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Labour productivity</td>
<td>-1.1</td>
<td>0.2</td>
<td>1.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Unit wage costs</td>
<td>5.1</td>
<td>4.8</td>
<td>1.7</td>
<td>0.5</td>
</tr>
</tbody>
</table>
in the terms of trade to 2003 but a worsening in 2004 caused by the downward trend in unit wage costs (see Table 4). The CPI rose steeply, by 4.5%, in 2001. One percentage point of this can be attributed to various tax measures (introduction of the eco tax, the rise in the standard rate of VAT from 17.5% to 19%). The contribution of indirect taxes and the non-market sector will be much lower in 2002-2004. This year the CPI should rise by 3.4%. In 2003 and 2004, the rise in the CPI is projected to decline further, to 2.6% and 2.2% respectively. Much of the cause of the jump in the CPI in 2001 and 2002 is unit wage costs, which added 2.5 percentage points to inflation last year and 2.3 percentage points this year. In 2003 and 2004, unit wage costs should contribute much less to consumer price inflation (0.9 percentage points in 2003 and 0.5 percentage points in 2004). The increase in unemployment will compel lower pay increases in 2003 and 2004. In addition, the stronger rise in labour productivity will lead to a weaker rise in unit wage costs and this will contribute to lower inflation. Import prices contributed 0.4 percentage points to private consumption prices in 2001 as a result of high commodity prices in 2000. This year, by contrast, as a result of sharp falls they will make a negative contribution to the consumer price inflation of 0.1 percentage point. The contribution of import prices to overall consumer price increases in 2003 and, especially, 2004 will be higher, at 0.4 and 0.5 percentage points respectively, partly as a result of the recovery in the world economy. Gross profit margins were under pressure in 2001, as in previous years. During the 2002-2004 projection period, gross profit margins should develop favourably, mainly as a result of lower unit wage costs. The contribution of gross profit margins to inflation should decline, however, over the three years from 0.4 to 0.2 percentage points. This is because of lower consumer price rises and the contribution of commodity prices to the increase in private consumption prices.

This picture of the consumption price and its components appears to be in line with the forecast effects of the introduction of euro notes and coins in January 2002 which is expected to lead to lower consumer price increases over the medium term as a result of greater price transparency and fiercer price competition within the euro area.

**Public sector**

In 2001, the gross debt ratio of the public sector was 52.9% and the government budget surplus was 0.2% of GDP. In the next few years, the gross debt ratio will decline further from 50.8% of GDP in 2002 to 47.6% of GDP in 2004, mainly as a result of the denominator effect. The total debt in euro will increase from 2002 because of budget deficits. The economic slowdown in 2001 and 2002 has turned the budget surpluses of the past three years into a deficit of 0.1% of GDP in 2002. The actual deficit is forecast to rise to 0.7% of GDP in 2003 and then decline again to 0.4% of GDP in 2004. This assumes no policy changes. The on-going deficits during the projection period are mainly a result of the downturn in economic growth in the second half of 2001 and early 2002. A number of other factors, too, will contribute to the rising deficit in 2003. These are an increase in public-sector investment, growth in contributions to municipal and provincial funds and the disappearance of windfalls from inheritance and dividend taxes.

**Table 4 Breakdown of consumer price rise**

<table>
<thead>
<tr>
<th>Contributions in percentage points</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td>0.4</td>
<td>-0.1</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Indirect taxes and non-market sector</td>
<td>1.7</td>
<td>0.5</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Unit wage costs</td>
<td>2.5</td>
<td>2.3</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Gross margin improvement</td>
<td>-0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Private consumption deflator</td>
<td>4.2</td>
<td>3.1</td>
<td>2.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Consumer price index</td>
<td>4.5</td>
<td>3.4</td>
<td>2.6</td>
<td>2.2</td>
</tr>
</tbody>
</table>

1 Indirect taxes, natural gas, rents and public-sector services.
2 Including the cost of capital.
The legacy of 2001: negligible GDP spillover

According to the baseline projection, GDP volume growth in 2002 will be only 0.7%. Nevertheless the baseline projection forecasts relatively strong quarter-on-quarter growth for the second half of 2002 with the economy growing by 0.3% in the third quarter compared with the second quarter. The quarter-on-quarter figure for the fourth quarter is 0.6%. It can, therefore, be concluded that the economy will be roughly in line with the annual trend growth of 2.5% by the end of 2001.

Growth in the fourth quarter was in fact negative. As noted above, growth in the course of 2002 will pick up sharply to 0.5% in the third quarter and 0.6% in the fourth quarter. Chart 1b presents the associated GDP volume figures in levels and they again show the stagnation in the economy at the end of 2001 and the early part of 2002. The average levels for the two calendar years are shown by dotted lines. Year-on-year growth is, by definition, the growth of these two average levels and comes out at 0.7%. The part of that 0.7% that spilt over from 2001 is negligibly small and even slightly negative. Unlike in previous years with high economic growth, this spillover is tiny. Economic growth in the Netherlands will, therefore, be low in 2002 as a result of the economic downturn which started in mid-2001. This is clear from Chart 1c, which shows the GDP growth figures for 1996 to 2002, highlighting the proportion of the growth generated by spillover. Spillover accounted for more than one-third of total growth in 1996, 1998 and 2000 and almost 90% in 2001.

The negligible legacy in 2002 from the previous year may nevertheless be counteracted to a significant extent if there were a (robust) economic recovery in early 2002. To illustrate this, Chart 2a shows a scenario in which growth in the first quarter is 0.3% which is 0.3 percentage points up on the projected figure. It is also assumed that the economy will continue to grow gradually during 2002, by 0.5%, 0.6% and 1.0% in the second, third and fourth quarters respectively. In this scenario, therefore, the recovery in economic growth forecast by the projection has been brought forward from the second to the first quarter of 2002. Computations suggest that economic growth in 2002 would be 1.2% in these circumstances despite the disappointing spillover from 2001.

This is, of course, a purely technical method of computing GDP volume growth and no causal relationships such as explanations for the source of the growth are presented. The aim of this simple exercise, however, is to illustrate the relativeness of reporting calendar figures. It puts a GDP volume growth figure of 0.7%, which is disappointing after a series of healthy growth figures for years up to 2001, into perspective. It is, therefore, very important that an accurate estimate of the first quarter’s figures is shown when determining calendar year-on-year growth. If the Dutch economy were to pick up at an earlier stage than forecast or show greater resilience, for example, 0.5% in the second quarter rather than the assumed 0.3% (see Chart 1a), GDP volume growth in 2002 could be well above 0.7%. The Scenario analysis addresses attention to a stronger recovery in the economy from an additional rise in domestic spending.

Scenario analysis

Some uncertainties attach to the baseline projections as set out in the preceding section. They may be associated with influences from abroad or domestic developments. This section discusses two scenarios, both with a domestic basis. The first is a scenario which shows how encouragement of labour supply can contribute to controlling inflation. An increase of 0.2 percentage points in the labour participation rate over a period of four years has considerable benefits for the Dutch
The Dutch economy in 2002-2004: a forecast using MORKMON

Chart 1a Quarter-on-quarter growth
Actual and baseline projection

Chart 1b GDP levels, 1995 prices
Actual and baseline projection, index 2001=100

Chart 1c Year-on-year growth 1996-2002, showing spillover

Chart 2a Quarter-on-quarter growth
Actual and scenario

Chart 2b GDP levels, 1995 prices
Actual and scenario, index 2001=100

Quarter  Annual average
economy in terms of inflation, economic growth and employment. The second scenario addresses the consequences of improved consumer and producer confidence resulting in more private consumption and business investment. Consideration is also given to a possible mirror image of this scenario leading to a ‘double dip’. This term refers to a pattern of low economic growth followed by a brief period of recovery and then another slight downturn. This type of double dip has been seen many times in the past in the United States, in the Netherlands and neighbouring countries.

Inflation and labour supply
Last year the Netherlands saw unusually high annual CPI inflation of 4.5%. Although, inflation should fall to 3.4% this year, it is still at a high level compared with neighbouring countries. Inflation is expected to be 2.6% in 2003. There are several causes underlying the persistent high inflation.

Without doubt, the main cause was the sharp growth in the Dutch economy from 1993 to 2001. In 2001, factors such as the VAT and eco tax increases on 1 January played a role, and the foot-and-mouth outbreak created additional price rises that year. These were non-recurring factors and will fall out of the CPI inflation in 2002. On the other hand, the introduction of euro notes and coins is pushing prices up in 2002. Earlier research by the Nederlandsche Bank estimated this effect at 0.2 to 0.4 percentage points. The (tentative) assumption is that this effect will also drop out of CPI inflation after about a year.

Strong economic growth in the second half of the 1990s caused demand in some markets to rise faster than supply, putting upward pressure on prices. This applied in particular to the labour market where shortages in certain sectors manifested themselves in the form of high pay rises. In consequence, unit wage costs rose strongly between 1998 and 2002 (see Table 5). This normally leads to manufacturers raising prices for finished goods, thus generating wage and price rises which can have a considerable degree of persistence. Policies focusing on containing such developments are tighter monetary policies and a simultaneous attempt to control the growth of government spending. However, monetary policy, which is determined for the euro area as a whole, has been too generous for the Dutch economy, and central government spending policy is also failing to provide a brake.

Inflation can be reduced more quickly in the current Dutch situation by stimulating the supply of labour. A greater supply of labour could reduce shortages in the labour market and so wage costs would rise more slowly. In recent years, the supply of labour has grown steadily at 1.7% to 2% per year (see Table 5) making it a significant factor in the growth of the economy.

The strong rise in the supply of labour in the period 1995-2000 can be largely explained by the growing number of women entering the labour market. The higher participation of women in the labour market, to 61% in 2001, has brought the Netherlands into line with other western European countries, where this figure used to be considerably higher. Most women who wanted to enter the labour market have now done so and no further large increase can be expected from this source.

Growth in the supply of labour is slowing down considerably. For the near future, our forecast sees growth of only 1% annually in 2002 and 2003 and 0.9% in 2004. Table 6 shows the positive effects of encouraging labour supply. It presents the results of a MORKMON computation with an increase in the labour participation rate of 0.2 percentage points (over 20,000 people) per year over the next four years.

The additional supply of labour initially increases unemployment figures. In line with the greater supply and generally unchanged demand for labour, wages rise more slowly than in the baseline scenario. Relative to the baseline scenario, labour thus becomes cheaper, stimulating demand for labour. This effect can be detected after a number of years in the growth of employment. The lower pay rises press down consider-

| Table 5 | Labour supply, unit wage costs, GDP volume 1996-2002 |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Percentage changes | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 1 |
| Labour supply | 1.7 | 2.0 | 1.8 | 1.7 | 2.0 | 1.5 | 1.0 |
| Unit wage costs (private sector) | 1.3 | 1.3 | 2.5 | 2.1 | 3.7 | 5.8 | 4.3 |
| GDP volume | 3.0 | 3.8 | 4.3 | 3.7 | 3.5 | 1.1 | 0.7 |

1 Forecast.
ably on inflation, utilisation rates recover and so exports and business investment are stimulated. The overall effect on the Dutch economy as a result of this positive supply shock is, therefore, clearly beneficial, with 0.2% to 0.3% additional GDP volume growth in each year in which the supply of labour increases. Policies to encourage labour supply could have even more beneficial effects if there were pay restraint at the same time. This can be seen in the second part of Table 6 which shows the effects of moderating growth in wages by 0.5% in year 1. Pay restraint creates growing employment for a number of years and thus lower unemployment compared with the baseline. It also directly depresses inflation and has a neutral effect on GDP volume growth. The effects of a rise in the supply of labour and pay restraint can be calculated by adding together the results of the two simulations in Table 6.

Higher private consumption and business investment
According to the baseline projection, private consumption will grow by only 1.5% in 2002 and business investment will actually fall this year. A scenario with improving consumer and producer confidence and actual growth in consumer spending and business investment is quite feasible, however. Given the current low growth in private consumption and the tax cuts in 2001, which were largely saved rather than spent, an increase in private consumption and consequently also in business investment is more likely than a further downturn. Such a domestic boost to demand would cause the Dutch economy to pick up more quickly than forecast in the baseline projection. As noted in *The legacy of 2001: negligible GDP spillover section*, this could accelerate growth in the Dutch economy.

Chart 3 shows the effects of such a boost to domestic spending. Consumers and producers spend and invest more from the second quarter of 2002 onwards. Private consumption picks up by 1.5% in the second quarter to 2% in the fourth quarter, compared with the baseline. Growth in business investment is 1.3% to over 2% in this period. It is assumed that this additional growth continues into the fourth quarter of 2003. At this point, private consumption and business investment are slipping but, as the chart shows, they are still growing in comparison to the baseline thanks to the additional economic growth which has been generated. In this scenario, economic growth for the calendar year 2002 is 0.5 percentage points higher than in the baseline projection and would, therefore, come out at 1.2% rather than 0.7%. As follows from the chart, the consequences of such a scenario with temporary boosts to spending are considerable in terms of GDP volume growth.

**Table 6 Labour supply encouragement**
Effects in percentage points unless stated otherwise

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour participation rate</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Simulation results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP volume growth</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Employment growth</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Growth of wage per employee (private sector)</td>
<td>-0.2</td>
<td>-0.8</td>
<td>-1.0</td>
<td>-0.7</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>-0.2</td>
<td>-0.5</td>
<td>-0.6</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth of wage per employee (private sector)</td>
<td>-0.5</td>
<td>-0.1</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Simulation results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP volume growth</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Employment growth</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>-0.2</td>
<td>-0.1</td>
<td>-0.0</td>
<td>0.1</td>
</tr>
</tbody>
</table>
growth and, as a result of this, employment grows. After a lag, falling unemployment creates higher pay rises which in turn create some additional inflation in 2004. Unlike the positive supply shock in the form of encouragement of labour supply, as simulated in the last section, this positive demand shock does create price rises over time.

The mirror image of this optimistic scenario with respect to GDP volume growth, a scenario in which economic growth again falls rather than grows, is not entirely impossible. Such a scenario can be referred to as a ‘double dip’. This term refers to a pattern of low economic growth followed by a brief period of recovery and then another slight downturn. Two dips quickly following each other.

Such double dips have been common in the past, also in the Netherlands, as shown by the trend in economic growth in 1979-1981, 1982, 1985-1987 and 1992-1994 (see Chart 4). This pattern has sometimes been more marked in other European countries and the United States than in the Netherlands. The recessions in the United States in 1960-1961, 1969-1970, 1973-1975 and 1979-1982 were of this type. Since the 1960s, only the recession of 1990-1991 has not followed this pattern in the US.

Conclusions

The MORKMON projections set out in this article suggest that the Dutch economy will recover robustly in the course of this year. The improving international economic climate will put annual economic growth at the trend level by the end of 2002. In contrast, calendar year growth in 2002 will be only 0.7%, partly as a result of the disappointing GDP volume growth in the second half of 2001 and zero growth in the first quarter of this year. Economic growth in 2003 and 2004 will be much higher at 2.1% and 2.8%. Since the labour market lags behind economic developments, unemployment will increase by 50,000 persons in 2002 to 196,000 persons. In 2003, the number of unemployed persons will be 248,000. Only in 2004 will the increase in unemployment level off somewhat. Union-negotiated wages will rise less fast in 2003 and 2004 as a direct result of the slack labour market during the projection period. As a result of this, and increases in the growth in labour productivity, the increase in unit wage costs will be slower at the end of the 2002-2004 projection period. The level of inflation in the years 2002-2004 will be lower than the 4.3% in 2001. Although inflation in 2002 is still relatively high, at 3.4%, it will fall in 2003 and 2004 as a result of lower wage costs but the slowdown will take some time. It is expected that profit margins over the projection period will be positive, but contribute less and less to (increasingly lower) consumer price increases. To some extent, the lower consumer price increases could be a result of fiercer competition and greater transparency within the euro area following the introduction of euro notes and coins. CPI inflation will fall further in 2003, to 2.6%, and turn out at 2.2% in 2004. After four years of actual surpluses, the government budget for the entire 2002-2004 projection period shows actual deficits.

The scenarios looked at the macro-economic effects of government policy aimed at raising labour participation and increasing domestic spending. The first scenario showed a further rise in labour participation leading to higher economic growth and lower inflation. The second scenario showed the effects which may come from a sharp increase in private consumption and business investment. This scenario is also more optimistic about economic growth than the baseline projection.

2 See also ‘Smooth euro changeover, higher prices?’, DNB Quarterly Bulletin March 2002, pages 53-60
3 The ECB releases projections for the euro area every six months, in its June and December Monthly Bulletins, with calculations drawing on the projections by the euro area’s individual national central banks and the ECB staff.
5 The first quarterly figure in the projection is a first estimate by Statistics Netherlands.
Publications
DNB Staff reports have been published since 1996. Aim and scope of this publication series is to disseminate a selection of the research done by staff members of the Bank to encourage scholarly discussion. An overview of DNB Staff reports can be found on the Bank’s website, http://www.dnb.nl. During the first and second quarter of 2002, eleven Staff reports were published which are summarised below.

No. 72 Central Bank Independence: Low inflation at no cost? A numerical simulations exercise

M. Demertzis

The independent nature of the Central Bank is often associated with achieving low and stable inflation. Further to that the merits of independence are stretched to achieving lower output variability when compared to a government run monetary policy. In this paper we use the Alesina and Alesina and Gatti model to examine how often an Independent Central Bank can achieve an improvement on both counts. To do that we run numerical simulations where we change the ex ante probability of elections (and hence the degree of electoral uncertainty) with a view to determining how the private sector’s perceptions affect the level of output variability. Our conclusions agree with the Alesina and Gatti assertion that there will exist occasions that both political parties will consent to the running of monetary policy by an independent institution but that is the least often occurred outcome. On theoretical grounds therefore, the trade-off between inflation and output variability (à la Rogoff) is still a valid one.

Keywords: Central Bank Independence, Output stability, Political uncertainty.

JEL codes: E51, E52, G21.

No. 73 The Credit Channel in the Netherlands: Evidence from bank balance sheets

L. de Haan

This study contributes to the empirical evidence on the lending channel in the Netherlands using individual bank data. The main conclusion is that a lending channel is operative in the Netherlands. However, it is only operative for unsecured and not for secured lending, possibly because loans with state guarantees get special treatment by banks. Effects of monetary tightening on unsecured lending are more negative for smaller, less liquid and less capitalised banks, in line with the lending channel theory. A contribution of this study is that it gives evidence that the monetary policy impact on bank lending also depends on the market segment in which a bank is active. The evidence suggests that the lending channel is not affecting lending to households as much as it is affecting lending to firms.

Keywords: Monetary policy transmission, bank lending.

JEL codes: E51, E52, G21.

No. 74 Finance, law and growth during transition: a survey

R.T.A. de Haas

This paper surveys the economic literature on the links between finance, law and growth in the Central and Eastern European transition countries. The literature that is surveyed at the outset of the paper shows that if a financial system is based on an adequate legal system it can positively contribute to economic growth. However, the financial system in CEE appears to have been restrained in making such a contribution. The theoretical and empirical results discussed further on in the paper partly explain this by showing that privatising is in itself not enough to improve the functioning of the local banking systems. An adequate legal and institutional environment proves to be a necessary condition as well. The insufficient quality of institutions has manifested itself in the continuation of soft budget constraints for (formerly) state-owned enterprises combined with credit rationing of small and medium sized private enterprises. During the last years, formal institutions have been upgraded remarkably fast in some countries. In principle, this has improved the operating environment of many financial institutions. However, such ‘paper’ improvements turn out to have only a limited effect as long as the enforcement of the new laws and the rejection of corrupt practises have not yet reached the level of an average market economy.

Keywords: Financial development; Economic growth; Legal institutions; Transition.

JEL codes: F36, G20, O16.
No. 75 A Theory of the Currency Denomination of International Trade

P. Bacchetta and E. van Wincoop

Nominal rigidities due to menu costs have become a standard element in closed economy macroeconomic modeling. The ‘New Open Economy Macroeconomics’ literature has investigated the implications of nominal rigidities in an open economy context and found that the currency in which prices are set has significant implications for exchange rate pass-through to import prices, the level of trade and net capital flows, and optimal monetary and exchange rate policy. While the literature has exogenously assumed in which currencies goods are priced, in this paper we solve for the equilibrium optimal pricing strategies of firms. We find that the higher the market share of an exporting country in an industry, and the more differentiated its goods, the more likely its exporters will price in the exporter’s currency. Country size and the cyclicality of real wages play a role as well, but are empirically less important. We also show that when a set of countries forms a monetary union, the new currency is likely to be used more extensively in trades than the sum of the currencies it replaces.

No. 76 Commodity Currencies and Empirical Exchange Rate Puzzles

Y. Chen and K. Rogoff

This paper re-examines empirical exchange rate puzzles by focusing on three OEC economies (Australia, Canada, and New Zealand) where primary commodities constitute a significant share of their exports. For Australia and New Zealand especially, we find that the US dollar price of their commodity exports (generally exogenous to these small economies) – has a strong and stable influence on their floating real rates, with the quantitative magnitude of the effects consistent with predictions of standard theoretical models. However, after controlling for commodity price shocks, there is still a PPP puzzle in the residual. Nevertheless, the results here are relevant to many developing country commodity exporters, as they liberalize their capital markets and move towards floating exchange rates.

Keywords: Exchange Rates; Commodity Prices; Purchasing Power Parity.


No. 77 Exchange Rate Pass-Through, Exchange Rate Volatility, and Exchange Rate Disconnect

M.B. Devereux and C. Engel

This paper explores the hypothesis that high volatility of real and nominal exchange rates may be due to the fact that local currency pricing eliminates the pass-through from changes in exchange rates to consumer prices. Exchange rates may be highly volatile because in a sense they have little effect on macroeconomic variables. The paper shows the ingredients necessary to construct such an explanation for exchange rate volatility. In addition to the presence of local currency pricing, we need a) incomplete international financial markets, b) a structure of international pricing and product distribution such that wealth effects of exchange rate changes are minimized, and c) stochastic deviations from uncovered interest rate parity. Together, it is shown that these elements can produce exchange rate volatility that is much higher than shocks to economic fundamentals, and ‘disconnected’ from the rest of the economy in the sense that the volatility of all other macroeconomic aggregates are of the same order as that of fundamentals.

Keywords: Exchange rate pass-through; exchange rate volatility; exchange rate disconnect; local currency pricing; noise traders.


No. 78 Exchange Rates and Fundamentals: a Non-Linear Relationship?

P. de Grauwe and I. Vansteenkiste

We test whether the relationship between the nominal exchange rate and the news in its underlying fundamentals has non-linear features. In order to do so, we develop a Markov switching model and apply it to a sample of low and high inflation countries. The empirical analysis shows that for the high inflation countries the relationship between news in the fundamentals and the exchange rate changes is stable and significant. This is not the case, however, for the low inflation countries, where frequent regime switches occur. We develop two non-linear models that are capable of explaining our empirical findings. A first model is based on the existence of transaction costs; a second one assumes the existence of agents using different information to forecast the future exchange rate. In both cases we find that
these simple non-linear models are capable of replicating the empirical evidence uncovered in this paper. 

**JEL codes: F31, F37.**

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**No. 79 How has the Euro Changed the Foreign Exchange Market?**

**H. Hau, W. Killeen and M. Moore**

This paper examines the primary forex statistics for the euro in relationship to the German mark prior to 1999. Contrary to widespread expectations our evidence indicates that the euro lost ground against the German mark in forex spot trading. We argue that the euro changed the forex market structure and particularly increased market transparency through currency elimination. The higher market transparency exposes the dealers to higher inventory risk as his inventory imbalances are revealed more easily to other dealers. Dealers in the euro markets recover increased inventory costs through higher spreads, which make the euro a less attractive transaction medium than the German mark. We explore the policy implications for the ecb, for euro outsiders and reflect upon the future of the forex market.

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**No. 80 External Wealth, the Trade Balance, and the Real Exchange Rate**

**P. R. Lane and G.M. Milesi-Ferretti**

We examine the link between the net foreign asset position, the trade balance and the real exchange rate. In particular, we decompose the impact of a country’s net foreign asset position ('external wealth') on its long-run real exchange rate into two mechanisms: the relation between external wealth and the trade balance; and, holding fixed other determinants, a negative relation between the trade balance and the real exchange rate. We also provide additional evidence that the relative price of nontradables is an important channel linking the trade balance and the real exchange rate.

*Keywords: Net foreign assets, trade balance, real exchange rate.*

**JEL codes: F21, F31, F41.**

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**No. 81 ppp and the Balassa Samuelson Effect: The Role of the Distribution Sector**

**R. MacDonald and L. Ricci**

This paper investigates the impact of the distribution sector on the real exchange rate, controlling for the Balassa-Samuelson effect, as well as other macro variables. Long-run coefficients are estimated using a panel dynamic OLS estimator. The main result is that an increase in the productivity and competitiveness of the distribution sector with respect to foreign countries leads to an appreciation of the real exchange rate, similarly to what a relative increase in the domestic productivity of tradables does. This contrasts with the result that one would expect by considering the distribution sector as belonging to the non-tradable sector. One explanation may lie in the use of the services from the distribution sector in the tradable sector. Our results also contribute to explaining the so-called ppp puzzle.

*Keywords: Real exchange rates; Purchasing power parity; Balassa-Samuelson; Distribution sector; ppp puzzle.*

**JEL code: F31.**

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**No. 82 On the Strength of the us dollar: Can it be Explained by Output Growth?**

**P.J.G. Vlaar**

One popular view on the current strength of the us dollar is that the higher growth in the us compared to Europe has stimulated foreigners to buy American assets, thereby driving up the exchange rate. In this paper a modified portfolio balance model is presented, in which it is shown that the impact of output growth on the exchange rate depends crucially on the origin of this growth. An improvement of the output gap is shown to actually depress the exchange rate whereas an increase in potential output growth leads to an appreciation, especially if this improvement is likely to be persistent. In an empirical example, it is shown that the equilibrium d-mark dollar rate is indeed positively affected by a positive trend growth differential between the us and Germany, whereas it is negatively affected by a positive output gap differential.

*Keywords: Rational expectations, portfolio balance model, Taylor rule, Kalman filter, foreign direct investment.*

**JEL codes: C32, C61, F32, F31.**