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Confidence and trust: empirical investigations for the Netherlands and the financial sector

Robert H.J. Mosch and Henriëtte M. Prast*

Executive summary

This study reviews the state of confidence and trust in the Netherlands, with special attention to the financial sector. An attempt has been made to identify the factors that determine individual trust and confidence and to uncover connections between the various variables. Based on surveys over the period 2003-2006, the data show that interpersonal trust in the Netherlands – the extent to which the Dutch trust each other – is high from both an international and an historical perspective. People who trust others typically display higher trust in institutions, promoting the smooth operation of such institutions. Yet the Dutch have little trust in some of the country's institutions, i.e., the euro, parliament and the social security system. The good news is the high level of trust in financial institutions and DNB, whereas trust in the integrity of business is clearly lower than that in financial institutions – but still higher than that in parliament. The high level of trust in the financial sector was not harmed by a recent bank failure in the Netherlands. At the individual level, a significant correlation turns out to exist between trust in parliament and trust in DNB. Trust in financial institutions and in the euro hinges on trust in parliament. This is surprising, because DNB operates at arm's length from politics in terms of monetary policy and acts as an independent agency in its supervisory duties and other responsibilities. People on benefits generally take a less favourable view of institutions and the economy in the Netherlands. This might mean that claiming social security makes people pessimistic, although we cannot rule out the possibility that a pessimistic nature reduces a person's chances in the labour market. In any event, being in work appears to be a prerequisite for citizens to feel part of society. Consumer confidence in the Netherlands has veered sharply down in the period 2000-2005, much more so than in neighbouring countries. Closer analysis of the data reveals a significant link between confidence in the economy and trust in the country's institutions. People with higher trust in institutions typically report greater confidence in the economy. This correlation, which had not previously been identified in the economic literature, only adds to the importance of trust in institutions and between people.

Keywords: financial supervision, consumer confidence, trust
JEL Classification: G18, Z13

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Table of contents

1 Introduction

This paper studies confidence and trust in the Netherlands, especially with regard to the financial sector. Confidence and trust are qualitative, emotion-based variables which seem to be a powerful force in the economy. The aim of this paper is to gain a better understanding of the relationship between confidence and trust, how confidence and trust influence the way people behave and how this affects the economy.

Confidence is about future developments, and reflects a conviction that favourable economic trends will emerge, continue or accelerate. This kind of confidence is measured by Statistics Netherlands every month in its indicator of consumer confidence. Trust is about relationships with other people, organisations, institutions or a system. It reflects the conviction that the other person or organisation will not merely act out of self-interest and is not out to damage one's individual interests. It also involves the expectation that an institution will do the things it is supposed to do competently and with integrity.

Low confidence can turn into a self-fulfilling prophecy that pushes the economy into recession and, if it vanishes altogether, puts currencies and payments at risk (e.g. hyperinflation (Katona 1975)). Kenneth Arrow argues that every economic transaction involves an element of trust (Arrow 1999). People in a high-trust society typically respect the government and the law, and observe rules and agreements, even informal ones (Putnam 1993; Fukuyama 1995). This increases efficiency as it reduces the time and money spent on enforcing contracts and agreements. In a low-trust environment, many endeavour to legally safeguard their own positions. This involves non-productive usage of production factors. Institutions may lower their transaction costs (Williamson 1985), but this does require trust in these institutions. Confidence and trust, then, are to be treated as social capital and hence as a production factor alongside physical capital, technology, education and labour.

Consumer confidence reflects not just the sum total of purely economic factors, but also communications and the media. The country's social climate creates – or discourages – fertile ground for optimism and confidence. But it is not just words that inspire and encourage confidence, actions also count. Predictability of policy is all the more important as governments are able to unilaterally change the rules if they so desire. Time consistency and the question of who supervises the supervisor – i.e., the government in this instance – are central issues here. This is one of the reasons why De Nederlandsche Bank (DNB)[1] operates at arm's length from the government and why today's central banks are committed to price stability (see the European Central Bank's mandate).

Traditionally, economists have paid little explicit attention to confidence and trust in their economic models. And yet as early as 1936 Keynes observed that, at times of uncertainty and lack of confidence, more factors than mere rational calculation affect economic behaviour (Hoogduin 1991). Put differently, it is harder to explain and predict people's economic choices – e.g., consumption, capital spending, investing – if confidence and trust are lacking.

With confidence and trust such a prime force in the economy, this paper assesses the situation in the Netherlands. It also probes the relationship between confidence and trust, and investigates the extent to which these tie in with individual characteristics such as education, position in the labour market, income and age – a crucial area of interest for both scientific and policy reasons. Our investigation of these background data is based on the findings of the DNB Household Survey (DHS), an independent Internet panel of the University of Tilburg's CentERdata, conducted over the period 2003-2006.

Some major conclusions are the following. Interpersonal trust in the Netherlands is high in international terms, and has in fact been growing in the past couple of years. It turns out to be positively correlated with confidence in the Dutch economy and institutions. The economic literature does not offer any unequivocal answers as to the causal relationships between these variables, but common sense tells us that trust is likely to be a prerequisite for confidence. However, public trust in some of the country's institutions – e.g. parliament, social security, the euro – has shown a downward trend. In parliament's case, this might reflect the fact that government is able to change the rules unilaterally. Public interest demands that politicians step in, but the key word is predictability. Change the rules too often and the people begin to perceive the government as untrustworthy. Another – possibly complementary – explanation is that interpersonal trust reflects proximity whereas institutions are felt to be overly distant, and as not belonging to the people.

Consumer confidence in the Netherlands has veered sharply downwards over the period 2000-2005. This is most likely attributable not just to relevant economic factors (employment, growth), but also reflects a lack of public trust in the country's institutions. Our study reveals a significant relationship between economic conditions in the Netherlands and public trust in the competence and integrity of the executive officers of financial institutions, in the integrity of corporate Holland, and in parliament. Insofar as we have been able to ascertain, the relationship between trust and confidence has not been theoretically investigated nor empirically identified before. We can rule out the possibility that the correlation is simply due to optimistic or pessimistic individual mindsets. Our analysis also shows up a negative correlation between being on benefits and the degree to which individuals consider themselves optimists.

Trust in financial institutions is high in the Netherlands. Over 90% of the population trusts that their bank or insurer will be able to pay up their money at all times, while three-quarters feel their pension funds will come through. We carried out an additional survey after a small bank in the Netherlands failed in December 2005, and it turns out that this has not jeopardized public trust in DNB and/or financial institutions in the Netherlands. Trust in the competence and integrity of financial institutions' executive officers is also firm (with only 8% of respondents taking a negative view), firmer at least than trust in the integrity of the corporate world (18% negative) and parliament (two-thirds negative).

DNB as an institution also enjoys a high level of trust. Moreover, people who are aware of the existence of the central bank and its supervision of financial institutions have greater trust in these institutions. Our findings also show that DNB's existence increases public trust in the financial sector and the euro. Still, one in five Dutch people reports little or no trust in DNB. Those on benefits are particularly gloomy about the country's economy and institutions, underscoring the importance of creating conditions conducive to improving their social and economic positions and to help make them less dependent on government policies.

One notable finding is that the Dutch associate DNB and its responsibilities with the world of politics. Actually, this does not go for DNB alone. People's trust in the euro also ties in directly with their trust in Dutch parliament. Perhaps this is because DNB's tasks are seen to have a bearing on society and to serve the public interest. Another reason might be recent political debates about the role of regulators and, more generally, independent governing bodies, and about demarcation lines between politicians and regulators in terms of responsibilities and accountability. The question as to who supervises the supervisors is legitimate, but one should beware of reputation risk if DNB and politics become too closely associated, especially since trust in DNB is fairly constant and fundamentally high, whereas public trust in politicians has slumped to significantly lower levels.

Ever since its launch, the euro has been shown to inspire few positive feelings in a large majority of the Dutch population. Our poll of euro confidence was taken after news coverage of the exchange rate at which the guilder entered the euro and the Dutch vote on the European Union constitution: its outcomes do not make for happy reading. A majority of around 60% of the Dutch population expressed none or very little confidence in the single currency. It is beyond dispute that emotions figure prominently here: people in the Netherlands have overestimated inflation since the birth of the euro, a phenomenon which is even stronger, and significantly so, when the word 'euro' is mentioned. Interestingly, the 2005 edition of the most important dictionary of modern Dutch includes the newly-coined term *gevoelsinflatie,* meaning perceived inflation. When it comes to individual determinants of confidence in the euro, our findings show that awareness of and trust in DNB make for a positive contribution to confidence and trust, as do interpersonal trust and trust in parliament. Significant individual characteristics include education, income and position in the labour market – i.e. being on benefits or not. Low income earners, the less educated and people on benefits typically have less confidence in the euro.

The structure of this study is as follows. Section 2 discusses the concept of confidence in greater detail, focusing on consumer confidence. It describes how confidence is measured and tracks trends in confidence over time, while also devoting attention to existing research into the determinants and effects of consumer and investor confidence. Section 3 does the same for the concept of trust. Section 4 paints a picture of confidence and trust in the Netherlands and puts these in an historical and international perspective, using the European Values Survey (EVS) and surveys which we commissioned through the University of Tilburg's CentER panel. Section 5 discusses trust in the financial industry and its supervision as well as in the euro, while Section 6 investigates the background characteristics affecting Dutch individuals' confidence in the economic climate and trust in the country's institutions, and the extent – if any – to which these variables are correlated. Section 7 summarizes our main conclusions.

2 Confidence

Strong confidence in the economy implies optimism about the future. And that often means more consumer spending and consumer credit. Manufacturers expect to sell more and expand their operations. Weak confidence, by contrast, points to pessimism about the future, and causes spending to fall. Consumers typically increase their rainy-day savings and manufacturers invest less as they expect to be able to sell fewer products in the future. In this sense, confidence reflects a view on the future direction of an economic or other development or trend. Focusing on confidence in relation to business and investor behaviour, Keynes noted that confidence primarily reflects the degree to which we trust our own observations and predictions:

If we expect large changes but are very uncertain as to what precise form these changes will take, then our confidence will be weak. (Keynes, 1936, p. 148)

Keynes's observation neatly captures Dutch consumers' current perceptions of political and economic trends. There was not much to be said about the state of confidence a priori, Keynes felt, and any conclusions must depend mainly on market players' actual behaviour and psychology (Hoogduin 1991).

Confidence does not directly relate to any relationships between people or to the quality of institutions. And yet confidence in the future might well tie in with faith in people and institutions (trust). This study will indeed demonstrate such a link in the Netherlands. Greater trust in the integrity of business, for instance, typically also predicts greater confidence in the economy (see Section 6).

Consumer, investor and business confidence have been known to turn into self-fulfilling prophecies. A loss of confidence in the future sparking a reduction in spending may well act as a brake on economic growth and usher in precisely the stretch of adverse conditions feared in the first place. Much the same can happen to investor confidence: if investors turn their backs on the markets as a result of loss of confidence, prices will fall. At times of excessive exuberance, the exact opposite will happen, with the subsequent boom almost inevitably reversing into panic at some point. So long as investors are rightly concerned – or rightly sanguine – about listed companies' fundamentals, all is well, and the market is just doing its job efficiently. But irrational pessimism or optimism have a tendency to exacerbate economic fluctuations and can end up hurting investors as well as damaging employment and growth.

2.1 Consumer confidence: some facts

Consumer confidence is a key predictor of economic behaviour, particularly consumer spending, saving and borrowing (Katona 1975), and many countries see the Consumer Confidence Index (CCI) as the key barometer of the economy. In the Netherlands, Statistics Netherlands and Eurostat together account for a consumer confidence index measuring Dutch consumers' views on their own financial circumstances as well as the development of the Dutch economy at large. The country's CCI breaks down into two sub-indices, one measuring the economic climate and the other consumers' willingness to spend. The index is compiled on the basis of two sets of questions put to the Dutch population. The first covers the general economic situation in the Netherlands (economic climate) and the second the personal economic circumstances of the respondents and their households (propensity to buy). The survey also includes questions on expected unemployment, inflation and saving, some retrospective (i.e., pertaining to the past twelve months and covering 'proven confidence') and some prospective (i.e., looking ahead to the next twelve months and relating to 'expected confidence'). A principal components analysis of Statistics Netherlands' questions throws up two key areas of interest: the Dutch public's views of the country's economy and of their own personal financial positions (Van Raaij and Gianotten 1990; Nijkamp, Gianotten and Van Raaij 2002).

To calculate the CCI, Statistics Netherlands questions its respondents about:

- Economic conditions in the Netherlands in the previous twelve months;
- Expected economic conditions in the Netherlands in the next twelve months;
- The household's financial circumstances in the previous twelve months;
- The household's expected financial circumstances in the next twelve months;
- Whether the timing is right for large purchases.

With the survey covering both past and future twelve-month periods, it allows for conclusions as to whether its respondents feel things are getting better (optimists), worse (pessimists), or will remain unchanged. Surveying a nationally representative panel of around 1,000 Dutch households each month, Statistics Netherlands arrives at the consumer confidence indicator by balancing the optimists against the pessimists.

People claiming to have confidence in 'the economy' could still mean any number of things: general economic conditions, their own personal finances, inflation, employment, the state of the balance of payments, the government, aspects of government policy, parliament, politicians and political parties, etcetera. Aside from the government in the Netherlands, confidence in the European Union ('Brussels') and European economic policy is becoming increasingly important.

As Chart 2.1 shows, there is a strong correlation between consumer confidence and consumer spending. This does not necessarily mean that consumer confidence itself impacts on spending. Insofar as consumer confidence solely reflects economic factors that are known to influence consumption – e.g. disposable incomes, wealth,

Chart 2.1 Consumer confidence (CCI) and consumer spending in the Netherlands, 1990-2004

Percentages

Source: DNB (2005a).

interest rates – the index is instructive, but does not have any independent, non-economic significance (Croushore 2005). That said, the CCI does provide valuable information about economic trends.

2.2 Investigating the determinants of consumer confidence

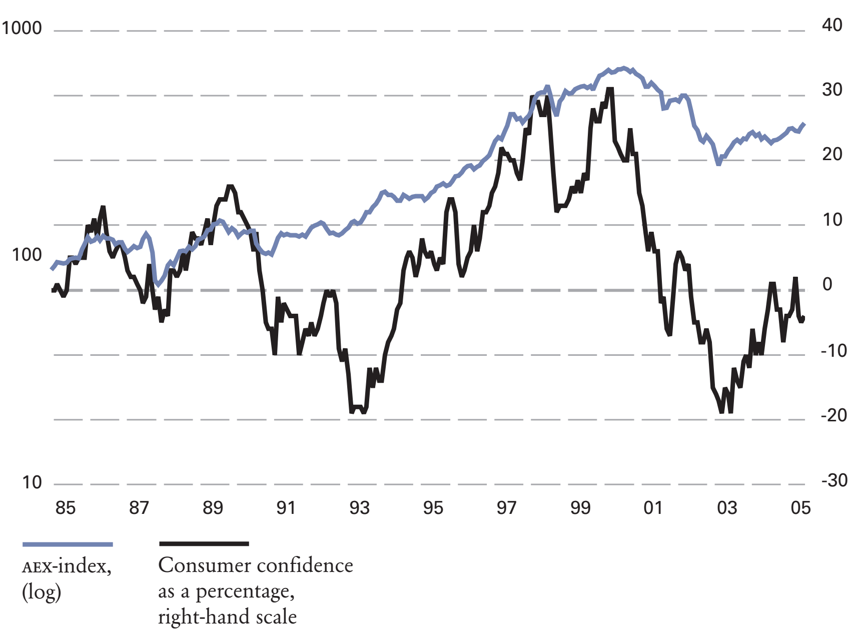
Research into the determinants of confidence was born out of the realisation that consumer confidence drives consumer spending, and thus economic growth. In fact, confidence would appear to be a crucial variable in understanding economic trends. Its determinants include social and demographic variables such as gender, age, education and income, the perception and assessment of economic and political news in the media, and people's own experiences in terms of prices, inflation and employment. Other studies have focused on the effect on consumer confidence of trends in share prices (excluding the wealth effect), of non-economic disasters, and of the social and cultural climate. The following findings emerge from this body of research:

Share prices and consumer confidence. Favourable stock-market trends obviously spark greater optimism in investor households through higher asset levels – an immediate wealth effect percolating through to consumer confidence from the stock markets. But rising share prices may also cause consumers to perceive better prospects for the economy as a whole, an indirect impact displayed by investors and non-investors alike.[2] Marshall noticed as much in 1923:

Stock exchanges are not merely the chief theatres of large business transactions; they are also barometers that indicate the general conditions of the atmosphere of business. (Marshall 1923, p. 89).

Non-investor households might also see share prices as an indicator of future economic trends and a predictor of their future chances of work and income from employment – an indirect effect that would make the economy at large more sensitive to share price fluctuations, especially as growing (or declining) consumer confidence translates into higher (or lower) spending. This is not merely an academic issue – it throws up important questions of policy. AEX (the Dutch stock market indicator) and CCI trends as captured in Chart 2.2 would seem to suggest that the correlation between share prices and confidence has increased since 1990; this is corroborated by regression analysis. The stronger link may derive from the rise in the number of

Chart 2.2 AEX Index and consumer confidence index (CCI), January 1985 to mid-2005



small investors during boom times and the concomitant increase in media coverage of share prices (newspapers, radio, TV), beamed into the homes of non-investors, too.

Incidentally, between 1980 and 1999, the year before the bubble burst, the value of Dutch households' shareholdings as a percentage of their net assets quadrupled from 3.3% to 13.1%. This surge was driven by an increase in investor numbers as much as by rising share prices up to the end of 1999. By 2000, 18.2% of Dutch households held shares individually – i.e. other than through say compulsory pension fund savings (Jansen and Nahuis 2003).[3]

In her empirical study of the relationship between share prices and consumer confidence, the Federal Reserve Bank's Maria Otoo (1999) made a similar distinction between the direct and indirect effects of share prices on consumer confidence. Drawing on data about individual respondents' shareholdings, she was able to relate their confidence to share ownership levels. Her analysis of monthly data for a large number of consumers from October 1995 through the end of 1997 led her to conclude that share prices do affect consumer confidence, but that their effects on investors or non-investors do not differ significantly. It would seem that stock markets in the United States are also considered an important indicator by non-investors, who account for around 60% of the American population. Otoo's study suggests that the 'indirect barometer' effect is primarily responsible for the correlation, although Otoo herself does not rule out a wealth effect.

Nahuis and Jansen (2002, 2003) analysed the relationship between share prices and consumer confidence for eleven European countries in the 1986-2001 period. Their approach differs materially from Otoo's in that they use aggregate rather than individual data. Nahuis and Jansen found that nine out of the eleven countries (the exceptions being Germany and Greece) showed a significant relationship between share prices and consumer confidence. For most of these countries, including the Netherlands, the cause-and-effect relationship went from share prices – in the shape of the AEX in the Netherlands – to consumer confidence, with a couple of weeks' time-lag.[4] Nahuis and Jansen demonstrated that the impact of share prices on the CCI is attributable to respondents' views of the economy at large and not to their own financial situations. This points to the indirect rather than the direct effect and corroborates the idea that investors and non-investors alike see the stock market as the barometer of their economies. Despite their different approaches, Nahuis and Jansen's conclusions partially coincide with Otoo's – even if they do rule out the direct share ownership effect altogether. Investigating the link for the United States and Belgium, Beltran Lopez and Durré (2003) found that consumer confidence is indeed influenced by share prices, particularly in the United States.

In a theoretical model, Abel (2002) assumes that consumers do not simply display rational economic behaviour but may also be pessimistic and doubtful. His model incorporates consumer pessimism as a condition in which consumer spending is lower than one might expect given objective economic data, the reason being that consumers – investors in Abel's model – underestimate their future wealth. This consumer pessimism materialises out of the blue, so to speak, and Abel analyses its consequences for consumers-cum-investors. At the same time Abel also introduces the possibility of doubt, which he defines as a situation in which the consumer-investor overestimates fluctuations in future investment income, and thus the risk of investing in equities. Abel shows that pessimistic investors underestimate their future consumption prospects, and that if we assume that consumers do not welcome too many changes in their spending patterns and living standards over time – a generally accepted assumption in the field – less-than-favourable expectations for the future spell lower consumption and higher savings today. Doubt merely serves to increase what is essentially a self-fulfilling prophesy here. Overestimating the risk of investing implies that less money will flow to equities, with disproportionately greater amounts ending up in risk-free investments. Abel's message is that consumer-investors who, for whatever reason, are pessimistic about their spending and investment behaviour themselves create justification for their pessimism, by tucking their money safely away and thus putting a brake on the economy. Note that Abel's findings apply only to consumers that are also investors. However, economies with proportionally many small investors might see a greater impact from this phenomenon.

Disasters, confidence and the Dutch economy. One-off disasters and other dramatic, non-economic events do influence consumer and producer confidence, but leave no lasting impression on the country's business cycle, so Nahuis (2001) found in his review of disasters that hit the Netherlands from 1973 through to 2000. Starting with the war in the Middle East in 1973 and ending with the fire in Volendam on New Year's Eve of 2000, his list does not include the 9/11 terrorist attacks. Focusing on non-economic disasters only, Nahuis purposely ignores such momentous economic events as the collapse of Barings Bank and the LTCM hedge-fund debacle, but he does include events such as the Bijlmer plane crash, the 1990-91 Gulf War, the NATO bombings of Bosnian and Serbian targets, etcetera.

Nahuis's findings show a clearly negative effect of these non-economic disasters on consumer confidence, but fail to point to any lasting and material impact on the economy. This is because non-economic disasters typically show up in the economic climate index but do not affect consumers' views of their own financial situations and prospects. And it is the individual component that displays the strongest correlation with consumer spending (Van Raaij and Gianotten 1990). Nahuis concludes that the feel-good factor takes a direct hit from any non-economic disaster, but that consumers do not feel its economic effects to have any bearing on them personally. This is an irrational reaction insofar as it would be downright impossible for the economy to contract without the average consumer noticing, but it does imply that non-economic disasters do not have any major impact on consumer spending, or at least not directly.[5] As it turns out, non-economic disasters do not, at the end of the day, influence growth in consumption and production – and thus the economy – despite their significant impact on consumer confidence.

Berry and Davey (2004) also find that consumer confidence is affected by non-economic events, or that it may react in a complex manner to unusual economic events. Like Nahuis, they conclude that this ultimately has little bearing on household spending. Terrorism also qualifies as a non-economic event, and DNB has investigated the relationship between terrorism and economic growth (DNB 2005b). Although a negative effect is indeed established, it is minor unless the intensity of terrorism increases or is sustained over a long period of time.

Social climate and confidence. And yet, in spite of all this evidence, we may still wonder whether disasters really do not matter. After all, could not an accumulation of bad news cause a fundamentally pessimistic attitude? Festinger, in his theory of cognitive dissonance (1957), found that people hear, see and remember what they already believe to be true (selective perception) and that they will tend to block out any news that does not concur with their fundamental attitudes. Applied to consumer confidence, this would suggest that consumers with a fundamentally pessimistic take would hear, see and remember mostly bad news and would ignore any bullish noises. Conversely, essentially optimistic consumers would disregard bad news and dismiss its messengers as doom-mongers. One would expect this effect to be most visible in the general economic climate indicator and less so – if at all – in people's assessments of their own finances. In addition, according to the representativeness heuristic concept developed in cognitive psychology, people typically see patterns in objectively unrelated events (Prast 2004). Working in the field of economic science, Barberis, Shleifer and Vishny (1998) applied this psychological concept to investor behaviour in an attempt to explain long-term overreaction to a series of good or bad news events. It is not inconceivable that the representativeness heuristic is just as valid for other news as it is for stock-market-related tidings. A series of separate disasters and bad news events could combine to instil a fundamentally bearish attitude in consumers, who would then start to set too much store by any subsequent bit of adverse information. This might give rise to a social climate in which consumers systematically overreact to bad news and underestimate the value of positive information.

That the social climate indeed matters to consumer confidence emerges from Zullow's 1991 study of the top 40 US songs for each year from 1955 to 1989, in which he screened the lyrics for a brooding, contemplative and pessimistic style. He also classified *Time* magazine covers for their bleakness, and then went on to analyse the correlation between lyrics, *Time* magazine covers and consumer confidence. In the period covered he found US consumer confidence to be significantly related to the degree of pessimism in pop songs and *Time* magazine covers, with a one to two-year lead-time. As it turned out, *Time* magazine covers appeared to be closely linked to the gloominess of popular songs. Of course, there remains the chicken-and-egg question as to what extent magazine covers have a dynamic of their own and are not merely a reflection of actual social and economic conditions. If that is the case, they serve no other purpose than to act as a weathervane for good or bad news. But that still does not stop people from being sensitive to the way a message is worded.

Christensen, Van Els and Van Rooij (2006) for example, established that the Dutch, when asked about the level of inflation in the 2001-2005 period, tend to overestimate inflation much more if the question contains the word 'euro'. She also found that people are willing to pay higher life insurance premiums if a description of their policy contained the word terrorism.

It is not unthinkable that consumer confidence may bear indelible marks from international corporate scandals and investor deceptions such as the Enron, Parmalat, Ahold and Shell affairs, and the building fraud, insider trading (Philips) and Legiolease cases that have rocked the Netherlands in particular. Drawing on data for the United States, the Netherlands and Italy, Guiso, Sapienza and Zingales (2005) established that the accounting scandals have dented investor trust in the stock markets as an institution and have depressed participation rates as a result. On top of these accounting irregularities and misdemeanours, the Dutch people's confidence and trust in their society and its institutions may well have been shaken by the murders of Pim Fortuyn and Theo van Gogh and the threat of terrorism. Meanwhile, Dutch business integrity has come under closer international scrutiny: corruption scandals in the Dutch building industry recently prompted Transparency International, the international non-governmental organisation devoted to combating corruption, to lower the country's ranking on its Corruption Perceptions Index.

2.3 Summary

Existing research into the determinants of consumer confidence reveals that factors other than consumers' personal finances do come into play. Even consumers who do not invest are affected by stock market prices, and non-economic news does impact on consumer views of the economic climate. There is a lack of direct research into trust in institutions and its effect on consumer confidence, a gap we are hoping to bridge in this study. But before we do, the next few sections will review existing studies of trust (Section 3), the actual development of confidence and trust in general (Section 4) and trust in the financial sector (Section 5).

3 Trust

Trust is about relationships, about how dependable and honest we consider others, and how worthy of our trust. Trust between people hinges on expectations about future behaviour. Sobel (2002) defines trust as the willingness to permit the decisions of others to influence your welfare. Uncertainty is a major factor here. You are only likely to allow others to influence your welfare if you expect them not to harm it. By definition, we never know how people will behave in the future. When people put their trust in others they act as if they know the future – and uncertainty is transformed into risk (Luhmann 1979). In other words, people who trust take the rough with the smooth and accept the risk that is inherent in the unpredictability of others' behaviour. It is a double-edged risk, with a potential upside as well as a downside. Confirmed trust in a transaction – economic or otherwise – yields more than no trust and no transaction: the positive risk. By contrast, lost trust often involves a greater loss than any gains arising from confirmed trust: the negative risk. Let us say, for example, that a financial consumer receives an investment proposal from a financial adviser with a bank promising an attractive 10% return on their investment. If the consumer trusts the adviser and invests EUR 1,000 in his or her investment scheme, this may result in a financial gain of EUR 100. But if the adviser proves untrustworthy, the full EUR 1,000 might be lost.

Trust entails two crucial aspects: competence and intention.[6] Does the adviser have investment competence and are his or her intentions honourable? These two aspects also relate to the DNB's supervisory role. One explicit requirement of DNB's supervision of financial institutions is that their executive officers – i.e. policymakers – be capable and reliable, while ongoing supervision constantly checks that institutions are run soundly and with integrity.

That they observe their contractual agreements is the least people expect from a trusted partner. Trust often goes way beyond this: it is not the letter but the spirit of the agreement on which cooperation between people turns, especially when unexpected events arise. it is not the letter of the agreement but its spirit that essentially lies centre at the cooperation between people, especially when unexpected events arise. Elster (1989) refers to trust in the sense of good will, when people feel bound by an agreement they would have entered into had they foreseen the unexpected event. If, in our example, a proposed change in the tax system threatens to jeopardise investment returns, the investment adviser proves worthy of trust if he or she provides timely and accurate advice to their customers even if no explicit agreements to this effect were made and the adviser might lose out on sales in the short term.

3.1 The economic importance of trust

The key importance of trust is that it promotes cooperation. Everyone intuitively knows that cooperation or partnership is essential for a society to run smoothly. The economic argument here is division of labour. As workers specialise in one particular aspect of the production process, training and experience will help them to become increasingly good at their jobs and thus boost labour productivity. As specialist skills and labour productivity increase, so will the need for coordination and cooperation if everyone is to reap the rewards of this division of labour.

As we have seen, any type of partnership or transaction entails a double-edged risk. Both parties stand to gain if the transaction is successful, but often one party could win more by cheating and abusing the other's trust. In many cases, then, it would seem advisable not to trust others. However, without trust there will be no cooperation and mutually profitable opportunities will be lost. Arrow (1999) argues that there is an element of trust in virtually all commercial transactions, and he blames lack of trust for a lot of the economic deprivation in much of the world. Note that well over two centuries before Arrow, Adam Smith in his Lectures on Jurisprudence (1766) linked the wealth of what was then Holland to the probity of its merchants:

Of all the nations in Europe, the Dutch, the most commercial, are the most faithful to their word.

A society needs mechanisms that inspire trustworthy behaviour – and thus trust – in order to foster partnership and cooperation, and increase prosperity. One option would be to contractually agree and if necessary legally enforce cooperation, but this is expensive and time-consuming. People can significantly reduce the transaction costs of cooperation if they are able to rely on social trust, as this allows them to sidestep the legal bother and close monitoring of the people with whom they cooperate. By extension, trust also reduces transaction costs because it increases the flexibility of agreements. If trust between transaction partners is high, they are much more likely to act in the spirit of their agreement rather than rigidly observe its exact terms and conditions.

In addition to trust between individuals, known as horizontal trust, there is also such a thing as 'vertical trust': the quality of relations between people and institutions. By institutions we mean all formal organisations such as the government, the police, the church, the army, the media and banks. Trust in institutions is a more complicated kind of trust, as it is easier for people to trust another human being than an abstract, relatively anonymous organisation. And yet institutions need people's trust if they are to be effective – and this is all the more true of institutions that were specifically created to inspire and build trust. DNB's supervisory duties, for instance, are meant to promote public confidence in the solidity and integrity of the entire Dutch financial system and its individual financial institutions, but DNB can only do its job properly if the people consider it to be trustworthy itself. If they do, they will rely on DNB's supervision to protect the security of their financial agreements and will by and large abstain from doing their own monitoring of the solidity and integrity of financial institutions' governance and executive officers – saving on transaction costs for society at large.[7] Besides, financial institutions will not even entertain the thought of conscious misdemeanour if they trust DNB to do a good job of supervising them. The degree of vertical or institutional trust, then, is a key indicator of the efficiency with which society operates.

Putting this link between trust, cooperation – economic or otherwise – and prosperity in an even wider framework, we come across the term 'social capital' that sociologists and political scientists in particular use to denote a set of non-formal characteristics of society that are crucial to its proper functioning (Coleman 1990; Putnam 1993; Fukuyama 1995). In addition to mutual trust, social capital implies closely related elements such as values, norms, community spirit and social networks. From the highest echelons of society to the lowest, social capital determines how people relate to one another. Entrepreneurs who fear dispossession by the government will invest less. People who believe the police to be amenable to bribes will feel the need to pay for their own protection. Employers who reckon their employees will stop working as soon as they are left unobserved will have to spend a lot of time watching and monitoring the work floor. People who think all politicians are just in it for the money and turn their backs on the political process will be giving just such politicians a chance to cling on.

Academic research on the subject typically distinguishes between societies where there is high mutual trust and social capital and countries with low scores on these variables (Fukuyama 1995; Putnam 2000). The Scandinavian countries, the Netherlands and – until recently – the United States are classified as high on the social capital index, while the likes of China, France and Southern Italy usually end up in the low social capital category. These classifications do presuppose a degree of path dependence: in countries or regions where people generally trust one another and act in a cooperative manner, a person would be well advised to act accordingly if they are not to incur blame and disgrace for being untrustworthy. However, if one happens to be in a region where opportunist behaviour is the norm, it would not be a good idea to expose oneself by trusting other people or organisations. After all, this trust would be immediately seized upon and abused. The first situation creates a virtuous cycle of trust given and received, the second a negative spiral in which people learn it is no use to be cooperative as one ends up paying the price eventually.

3.2 Sources of trust

People do not put their trust in just anyone. To establish someone's competences and intentions, they will make their own assessment of the person's – or institution's – reliability or trustworthiness. Sztompka (1999) makes a distinction between primary and secondary targets of trust linked to actors and institutions. Actor-related trust – or 'primary target of trust' to use Sztompka's terminology – involves three key indicators: reputation, performance and representation. Reputation captures the known track-record on the basis of consistent behaviour; performance refers to the actions themselves, current behaviour and the ensuing results; and representation is about personality, identity and status.

In institution-related trust – Sztompka's 'secondary target of trust' – the focus shifts to testimonies as to the trustworthiness of the person or institution that needs to be trusted. Indicators here include accountability, self-restraint and trust-inspiring situations. Accountability implies that trustworthiness can be imposed, for instance, by institutions monitoring behaviour and imposing sanctions on opportunist behaviour. DNB adds to the trustworthiness of financial institutions by ensuring commitment to and compliance with agreed standards. Self-restraint involves creating an environment that will allow a high degree of trustworthiness to be enforced externally, for instance, through self-regulation and certification. This indicator also refers to the actual set-up of the institution. By giving central banks independent positions vis-à-vis the government and politicians of the day – as specified by EMU – it becomes more plausible that monetary policies will indeed be geared solely to a stable currency. In Australia, the Reserve Bank even imposes a mechanism on its governor that partially links the latter's salary to the price stability he or she manages to achieve. Trust-inspiring situations are communities or networks in which people know each other and are aware of who can or cannot be trusted.

Legal system. A well-functioning legal system refers to the 'accountability' of Sztompka's trilogy of secondary trustworthiness. The legal system is the most important institution in this respect. It forms a standard solution to trust problems between (business) partners. The solution works in both a direct and an indirect way. The indirect way refers to the way in which the questions of corporate governance and bankruptcy are solved by legislation and jurisprudence. Well-developed legislation on corporate governance contributes to the trustworthy and transparent accounting by the management of its policies and actions to the shareholders, the employees, and the other stakeholders. This reduces the probability of mismanagement, fraud, and opportunistic behaviour by the management. Legislation on bankruptcy should prescribe clear procedures of what to do when firms run into insolvency problems. This reduces the vulnerability of creditors and business partners. The direct way in which the legal system mitigates trust problems is that it functions as a framework that enables parties to write down their agreements in official contracts and to enforce these contracts through legal procedures. The legal system generates incentives for parties to uphold the contract in the form of fines, recognisances and imprisonment. Thus, a well-functioning legal system is often considered as a very important mechanism to reduce transaction risks, which enhances mutual trust (Luhmann 1979). Moreover, Bachmann argues in line with Luhmann (1979), that 'legal norms do not fulfil their social function by actually being mobilized', but do their job in a latent manner by directing 'the expectations of social actors to certain routes of behaviour, long before sanctions are seriously considered by those who feel betrayed and might want to take recourse to legal action' (Bachmann 2001: 343). This implies that legal rules are more or less the same as social norms for co-ordinating behaviour. If the legal rules and the social norms point in the same direction, this will lead to mutually enforcement.

However, solving trust problems by means of formal contracting is not without practical problems. This solution works best, when parties write down complete and legally binding contracts. This is impossible to achieve. Incomplete information and bounded rationality lead to inherently incomplete contracts. Moreover, legal procedures tend to be expensive and protracted, while the verdict of the court is troubled by verification problems. Although the involved parties may be able to determine whether a certain transaction has taken place according to the agreement, this verification is not possible for external parties, like judges, because they lack the necessary insider knowledge and tacit information. Contracting could even have a perverse effect on trust. First, contracts may have the effect that parties concentrate on a narrow interpretation of the text instead of handling in the spirit of agreement when they implement the contract. Second, writing down all possible eventualities in the contract lessens the opportunity for spontaneous gifts in the occurrence of an unforeseen event. Mutual gift exchange or reciprocal behaviour is a source of social trust (Putnam 1993). Third, explicit accounting for all forms of opportunistic behaviour may lead to doubts about the trustworthiness of the transaction partner. 'Why do we need all these contractual arrangements? Doesn't he trust me?' In this way, an emphasis on formal trust mechanisms crowds-out informal trust aspects. Intrinsic motivations for trustworthy co-operation may thus be undermined by institutional trust mechanisms (see Tyler 1998; Ostrom 2000; Frey and Jegen 2001).

Networks and reputation. With networks and the reputation mechanism seemingly dominant forces in the creation of trust, these factors need to be examined in more detail. A network may be defined as an interconnected system of people or actors. Networks serve to inspire trust between business partners, as they allow efficient application of the reputation mechanism. A notable feature of networks is their effective use of the 'Grim Strategy', meaning that trustworthy behaviour is rewarded with trustworthy behaviour but that untrustworthy behaviour results in all ties being severed. The threat of being ostracised can be so powerful that opportunism simply does not occur. Trustworthy behaviour in the past creates economic benefits for the future, so that it is useful to build a solid reputation and not allow it to slip away by displaying uncooperative behaviour. The reputation mechanism works even more effectively in networks than in bilateral dealings, as the effects of learning and control are greater (Buskens 1999). Learning implies that the available information about dealings with individual members influences all members' expectations about transaction partners' future trustworthiness. Control means that all network members may agree to apply the Grim Strategy. A good reputation thus becomes extremely important to individual members, as a bad reputation rapidly spreads to all network members, and the chances increase that no-one within the network will want to have any dealings with someone who has failed to meet their obligations.

The mechanism works even better when network members have more frequent dealings with one another, for repeated partnerships create a shared history of interaction and behaviour. Trust should grow, provided that performance is good (Hirschman, 1984; Gambetta, 1988). With the initial risk now overcome, there is scope to build mutual trust through organisational learning behaviours; in fact trust may become routine as cooperation extends over time. Good (1988) argues that people are unable to constantly analyse every situation on its merits because of the sheer volumes of information they would need to process (bounded rationality). As long as performance in repeat cooperation remains good (i.e. performance and reputation mechanisms), there will be little cause for distrust. The rational side of trust as it were narrows to primary trustworthiness as measured by performance – partners build their own system of informal rules and codes about trust and trustworthiness. Lorenz (1988) demonstrated that between business partners a set of standards emerges about what is acceptable behaviour and what is not, and about what causes a breach of trust. If trust is not abused and a good reputation is built, the business partners gradually forge a rather more personal relationship. Routine-inspired trust, based on informal rules and codes for trustworthy behaviour, will increasingly regulate the relationship's economic interactions. With the reputation mechanism now in full play, business dealings are governed by implicit contracts that help to significantly reduce transaction costs and are self-perpetuating precisely because a carefully built reputation has economic value.

Sometimes called 'reputation carriers', businesses and political parties depend even more on a good reputation than do individuals, as their time horizons are longer (i.e. they potentially exist longer), they are more clearly recognisable (through their brand names), typically engage in more transactions and are better equipped to transfer reputations. Both use advertising to instil confidence and create greater brand awareness, and people learn to trust them or their brands without needing personal experience to inspire such trust. Consumers typically pay more for a well-known brand, as the brand inspires confidence in quality and a sense of projecting a good image (the expressive value of trust). Trust can create loyal supporters or buyers (consumer franchise) and word-of-mouth ambassadors for an organisation or brand.

Evaporating trust. Trust has to be earned. A few transactions into a relationship, a measure of trust is established ('proven trust') and trust in future transactions emerges; trust that over time might even evolve into 'blind trust' in the person, company or institution we are dealing with (Poiesz and Van Raaij 2002). Too much trust may be detrimental: pyramid schemes are an extreme example of virtually blind trust. Initially successful because people know and trust the scheme's initiator and/or his first customers and simply cannot believe this trusted person would make off with their money. When deception is seen to be at play, slowly built trust is instantly destroyed, in keeping with the old adage that 'reputation arrives on foot but departs on horseback'; De Beer and Mosch (2007) present a formal model of this asymmetric process.

The swiftness with which trust disappears means the financial sector cannot afford incidents: banks can get into deep trouble when trust evaporates, even when such a loss of trust is undeserved. If a fear of collapse causes a run on the banks as customers seek to remove their money to a safer place, even healthy banks may find themselves confronted by cash problems.

Violation of customer interests triggers discontent and loss of trust. According to attribution theory, two key dimensions come into play here (Weiner 1986): stability and intentionality. If they see their interests harmed in a separate incident, customers typically dismiss such incidents as exceptions ('unstable'), but if their interests are repeatedly jeopardised, they will see this as a general rule ('stable', structural) and their trust diminishes. If their transaction partner unintentionally damages their interests ('they weren't to know'), the damage is less severe than if the act was premeditated (intentional). Dissatisfaction and loss of trust are deepest when customer interests are knowingly and structurally harmed.

3.3 Investigating trust

Trust, public spiritedness and economic growth. Knack and Keefer (1997) draw on the outcomes of World Values Surveys to compare trust and norms of civic cooperation in some thirty countries. Of the two indicators constructed by them, the first – the indicator of trust – shows the percentage of respondents feeling that most people are trustworthy, as measured by the question: 'Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?' The second indicator measuring civic norms reflects questions on the acceptability of road tax evasion, income tax evasion, abuse of social security benefits, keeping money found, and failing to report accidental damage caused to a parked vehicle. Knack and Keefer demonstrate a significant impact between these variables and national income, with a 10% increase in trust adding 1% or more to annual economic growth, and with civic norms also having a significant effect. In terms of trust, the Netherlands scores reasonably in this study, claiming seventh place, but the country performs much worse when it comes to public spiritedness, coming seventeenth, ahead of only four other European countries. The Netherlands' low civic norms ranking may be due to a variety of reasons: its tolerance, which could just as easily be labelled indifference, its tradition of civil disobedience, and/or the effect of low levels of law enforcement (the ubiquitous Dutch policy of *gedogen* – turning a blind eye).

Other studies corroborate the link between economic growth and trust (e.g., La Porta, Lopez-de-Silanes, Shleifer and Vishny 1997; Inglehart 1997; Zak and Knack 2001), but some also dispute the correlation, notably Helliwell (1996) and Beugelsdijk and Van Schaik (2003). A positive correlation would at the very least appear to require the inclusion of emerging nations (Björnskov, 2003): trust is found to have a much bigger influence on economic growth in the poorer countries. One explanation for trust being a bigger factor in emerging countries could be that it serves as a substitute for absent or badly functioning legal systems and official lenders.

Trust and a well-functioning society. La Porta et al (1997) establish a positive link between trust and government effectiveness. To measure trust, they took the World Values Surveys' trust question and, to measure government effectiveness, they used investor surveys of the efficiency of the judicial system, corruption, bureaucratic quality and tax compliance. Higher levels of trust also correspond with other signs of a well-functioning society: infrastructure quality, infant mortality and levels of education. This correlation between trust and a well-functioning society matches Putnam's earlier findings on the differences between high-trust, high-social-capital Northern Italy and badly functioning Southern Italy with its low scores on social capital indicators (Putnam 1993).

Trust and company size. In his book on trust, Fukuyama (1995) argues that the link between trust and economic prosperity is measured by, among other things, the extent to which societies produce large companies. Fukuyama breaks down the world into countries with low trust in 'non-kin' and those marked by high levels of trust. Low-trust countries are family-oriented: people only trust their own families and closest friends. Most firms are family-owned, with key positions reserved only for family members. If later generations lack the will or capabilities to lead the – growing – company, its progress will be stunted. High-trust communities would allow non-kin to take up management and staff positions and thus allow the firm to evolve into a corporation. Trust in non-kin serves as a proxy for family ties as a coordination mechanism. Empirical studies by La Porta et al (1997) confirm Fukuyama's hypothesis.

Trust and international trade. Drawing on existing data, including Eurobarometer Surveys, Mosch (2004) identifies levels of trust between countries and demonstrates that the greater the trust the more countries will trade with one another. His data alone makes for fascinating reading: the Italians trust other nations more than other nations trust Italy, and the same goes for Sweden, the United Kingdom, Finland, France and Ireland, while the reverse is true for Greece, Portugal, Germany and Luxembourg. For the Netherlands there is a balance between the two variables: the Dutch trust other nationalities about as much as they are trusted themselves. Of the EU's fifteen former member states, Greece and Italy were felt to be the least trustworthy. Interestingly, Mosch's study finds that the EU's new entrants are the least trusted by the other countries. Drawing on econometric analysis that factors in both the usual variables and a trust indicator, Mosch investigates trade flows between countries and finds that a small change in mutual bilateral trust significantly boosts trade between two countries.

Interpersonal trust and trust in institutions. Studies into the correlation between interpersonal trust and trust in institutions show a clear link between these two variables, a link we ourselves have also established between the individual determinants of trust in institutions in the Netherlands (see Section 6). Opinions differ as to what is the cause and what the effect. Some, such as Putnam (1993), argue that high-trust countries create a strong impetus compelling institutions to display trustworthy behaviour. As this bottom-up view would have it, a high-trust society would be quick to expose less-than-trustworthy institutions and not easily re-elect corrupt and lying politicians, which would lead to greater trustworthiness of – and therefore trust in – institutions and politicians. By contrast, the top-down approach suggests that cause and effect are the reverse (Luhmann 1979) and that people who can count on their country's institutions being trustworthy have more reason to trust one another. If you are surrounded by lying and cheating people, so the argument goes, at least you know there are trustworthy institutions through which you can obtain justice – and which restrict the opportunities for deception. People who feel the law is not on their side are much less likely to observe the law themselves.

Rose-Ackerman (2001) finds trust in institutions and interpersonal trust to be a reciprocal rather than a one-way process. This implies that trust in a society can cumulate in an upward or downward spiral. A corrupt or incompetent criminal justice system allows dishonest people to get their way and grow rich, for instance, through blackmail. (The Mafia is a case in point here.) In such a society, crime pays and interpersonal trust becomes scarce. Trust in institutions declines further; after all, institutions are run by people, and people are not to be trusted. Things are a bit more complex in the real world, though. Take Russia and Ukraine, for instance: interpersonal trust runs high, but nearly all institutions are deeply distrusted. People in Romania and Bulgaria, by contrast, have little trust in one another, but consider some of their institutions very trustworthy indeed. Another strand of thought even casts doubts on the importance of (trust in) institutions such as the legal system for trust between people. Drawing on empirical evidence, Macaulay (1963) and Beale and Dugdale (1975) argue that most business relationships start off on the basis of a contract, but that this first agreement is hardly ever referred to in later dealings. Contracts are rarely updated and only dug up from the archives when it is too late. Practical considerations of course come into play here, as drawing up and enforcing contracts is a costly and time-consuming business. More importantly, religiously keeping contracts up to date can be construed as a sign of distrust, while a trip to the courts tends to spell the end to cooperation and mutual trust. Obviously, then, the interplay between interpersonal and institutional trust shows aspects of both substitution and complementarity, but the mutually complementary relationship would seem to be stronger; this is corroborated by our own findings (Section 6).

Trust, economic growth and happiness. Bjørnskov (2003) construes a social capital index that is made up of three indices, the first being the interpersonal trust variable also used in Knack and Keefer's study (1997), the second the percentage of the population actively participating in society, and the third the degree to which people trust their society to be free of corruption. Bjørnskov demonstrates that his index of social capital does not just imply higher economic growth but also increased happiness of the population. Unfortunately, this effect is restricted to the happy few, as few countries have so much social capital that it influences the sense of happiness of a large proportion of the population.

Financial illiteracy and trust. There is increasing evidence of widespread financial illiteracy among consumers (Prast 2005; Lusardi 2004). Financial ignorance does not just have an adverse effect on personal financial planning – trust in institutions, financial and otherwise, is found to have a positive correlation with financial literacy. The link between the two variables would appear to be that financial literacy fosters self-confidence – and self-confident individuals believe themselves capable of judging financial institutions and products on their merits (Schürz and Weber 2003). As Prast (2004) points out, a danger lurks here that people might overestimate themselves and their capabilities.

3.4 **Summary**

Trust implies a positive expectation about the future behaviour of others. Two aspects count heavily in the perception of trustworthiness, irrespective of whether we are dealing with trust between people or trust in institutions: competence and intention. It takes time and effort to build trust, but only a few slip-ups to lose it altogether. Trust requires careful handling. A good reputation – being trusted – is a major and valuable asset to individuals, businesses and institutions alike, as it facilitates their actions and improves their effectiveness. More generally, too, trust is important because of its beneficial effects on society and the economy. Trust acts as a coordination mechanism for behaviour, encouraging cooperation and reducing transaction costs. Empirical research shows a positive relationship between levels of trust across a society – i.e. social capital – and numerous economic and social indicators of success. Our next section reviews the state of trust and confidence in the Netherlands.

4 Confidence and trust in the Netherlands: an historical and international perspective

This section will look at the way consumer confidence and trust in institutions in the Netherlands have actually developed, and will provide an international perspective on these findings. Our investigation draws on the DNB Household Survey (DHS), an independent Internet panel of the University of Tilburg's centERdata. This representative sample of the Dutch population over the age of sixteen logs on to answer questionnaires via their home PCs. Focusing first on confidence, Section 4.1 will discuss Dutch consumer confidence and compare its development with that in neighbouring countries. Trust is next on our list. Section 4.2 reviews interpersonal trust and trust in a number of civil institutions, and the ways in which these have developed since 1981. In view of its importance to DNB, a separate section (Section 5) will be devoted to the confidence and trust of the Dutch in the financial industry and its supervision, as well as in the euro.

4.1 Trends in consumer confidence

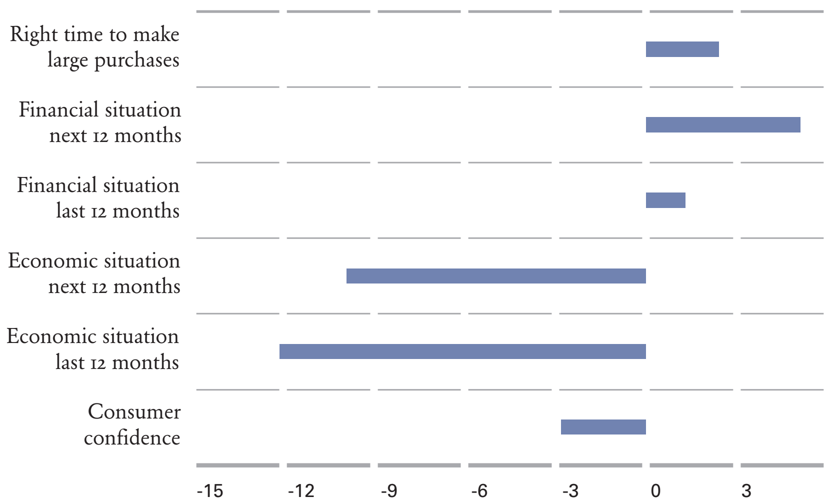
Statistics Netherlands finds Dutch consumers to be fundamentally pessimistic about the economy, with the pessimists on average outnumbering the optimists since it started measuring consumer confidence in 1986. With an average consumer confidence reading of –3, consumers have been particularly bearish about the general economic climate, rating it –11 for the past twenty years, whereas they have mostly assigned positive average ratings to their own financial situations and prospects. These findings are much the same as those recorded by the Social and Cultural Planning Office of the Netherlands (SCP), which in 2003 described the average Dutch person's attitude as 'I'm doing OK, but we're doing badly', and saw this reconfirmed two years later (SCP 2003, 2005). Chart 4.1 gives the average scores for the sub-questions and the total index in the period from 1986 to August 2005.

From an international perspective, consumer confidence levels in the Netherlands are not at all bad (see Chart 4.2), but the striking thing about these figures is that the country's comparatively strong position in 1986 – a position that strengthened further between 1995 and mid-2000 – has virtually evaporated since 2001. All the more important, then, to carry out an even more probing analysis of consumer confidence and its determinants.

Research by DNB (2005a) demonstrates that people's own financial positions,

Chart 4.1 Consumer confidence in the Netherlands, averages 1986-2005

Balance of positive and negative answers, as a percentage



Source: Statistics Netherlands.

wealth and home ownership have little effect on individual confidence in economic developments. DNB concludes: 'Apparently, in estimating their financial future, people tend to be guided more by the economic situation at large than by their wealth position.' Again, a conclusion that warrants more research into people's assessment of the country's economic situation.

To gauge consumer confidence in the country's economic climate, we had DHS pose the following question: *How would you currently rate the economic situation in the Netherlands?* Although not identical to consumer confidence as measured by Statistics Netherlands or Eurostat, the answers to this question do give an indication of the confidence felt by people regarding the way the Dutch economy is moving. Possible answers were 'very unfavourable', 'unfavourable', 'neutral', 'favourable' and 'very favourable'. The picture that emerged from the replies is captured in Chart 4.3, which leaves no doubt as to Dutch people's bearish take on their economy: no-one expresses a very favourable view, only 6% rate the economic situation as favourable, 29% are neutral while 55% and 8% take a gloomy or very gloomy view of the economy, respectively. Section 6 delves deeper into the variables that affect people's personal confidence in the economy.

Chart 4.2 Consumer confidence in Germany, France, the Netherlands, the United Kingdom and the EU-15, 1986-2005

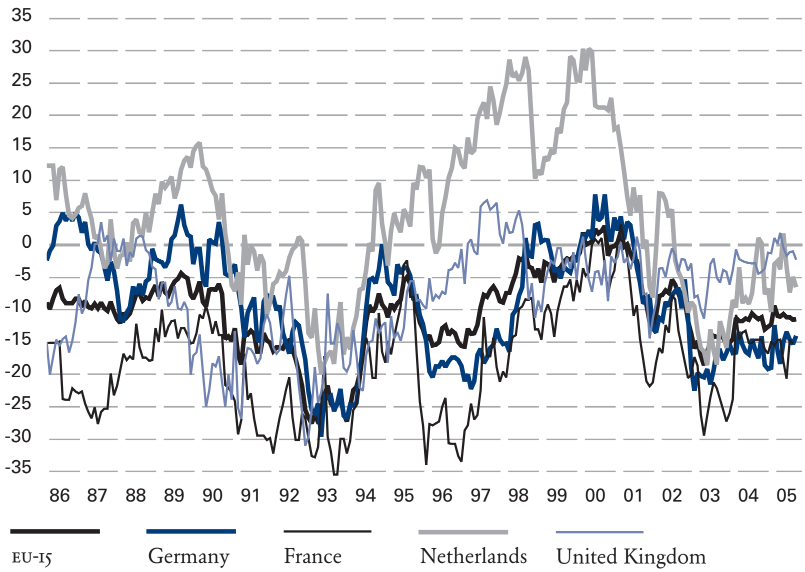
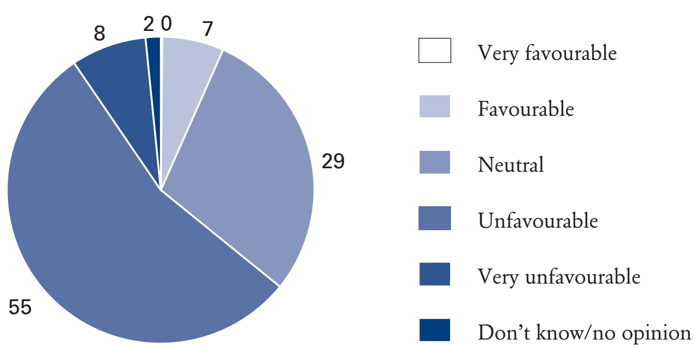


Chart 4.3 Public assessment of economic conditions in the Netherlands (December 2003/January 2004)

Percentages

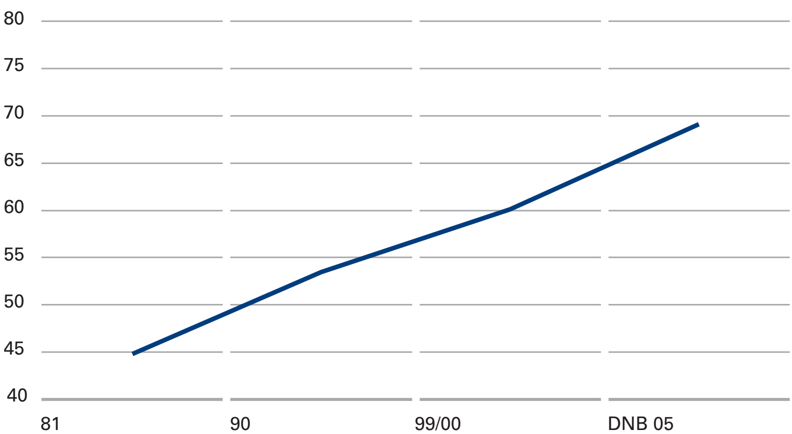


4.2 Trends in interpersonal and institutional trust

Tilburg University's Faculty of Social and Behavioural Sciences has been conducting research into Dutch views and values – including trust – since 1981, as part of an ongoing values survey of the differences in social, political, economic and cultural beliefs and opinions across countries, and of how these beliefs and opinions change as a result of economic and technological progress. Polling an ever-changing representative sample of around 1,000 people, the last official survey was conducted in 2000 and reported in 2005 (Halman, Luijkx and Van Zundert 2005). To capture trends and developments since then, we put a number of trust-related questions to our CentERpanel in July and August of 2005, which are identical to the Values Survey questions. Note that Values Survey and DNB Household Survey findings are not entirely comparable, for various reasons – one being that the Values Survey is based on face-to-face interviews, whereas the DNB Household Survey uses the Internet to obtain its replies. Research has shown the latter type of survey to be preferable: as it is more anonymous, its respondents are less likely to give 'politically correct' answers (Chang and Krosnick 2003a, 2003b). Another difference is the actual make-up of the DHS panel, with the respondents' average education levels slightly higher than in the Values Survey. These differences need to be kept in mind when interpreting findings.

Interpersonal trust. To measure interpersonal trust, CentERpanel put the now familiar question to the panel: Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Chart 4.4 captures the development over time of the percentage of people who feel that, on the whole, most people can be trusted. As the figure demonstrates, interpersonal trust in the

Chart 4.4 Interpersonal trust in the Netherlands, 1985-2005



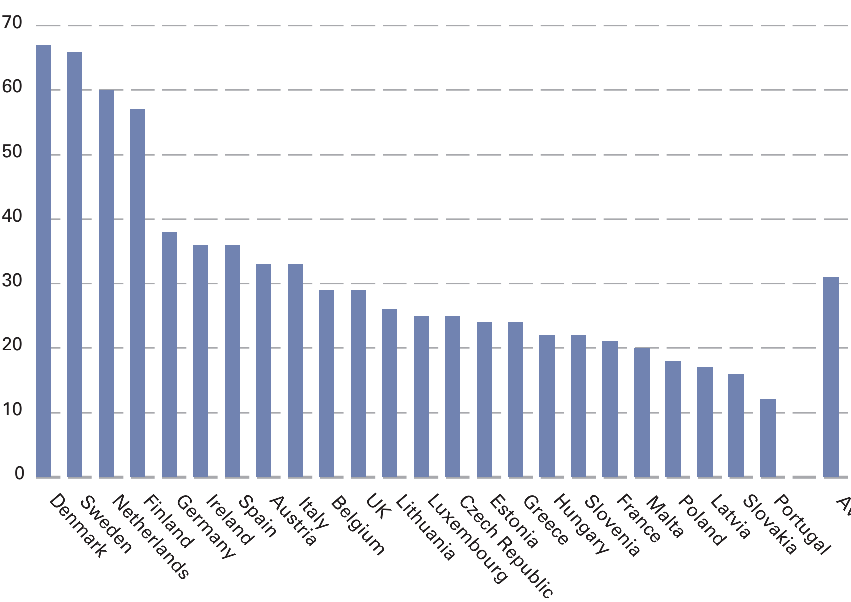
Netherlands has been on an upward trend in the past 25 years, growing from 45% in 1981 to nearly 70% in 2005. Although this is good news, comment is in order. International comparisons also show the Netherlands to do poorly on the index of civic cooperation, which measures disapproval of hit-and-run accidents, tax evasion, dodging public transport fares and abuse of social security benefits among other things (Knack and Keefer 1997). This seeming paradox of high interpersonal trust and low civic cooperation might be taken to mean that the Dutch perhaps put greater trust in one another because they do not blame themselves and others overmuch for ducking some rules. Be that as it may, Section 6 will show this variable to be a key factor in explaining trust in institutions in the Netherlands.

In 2000, an international comparison of interpersonal trust in the European countries (including new entrants) showed that the Netherlands also scored favourably in the international arena (see Chart 4.5). Claiming third place in this league table, the Netherlands even boasted an interpersonal trust percentage that was double the EU average. In fact, only four countries belong to what we might term the happy few: only in Denmark, Finland, the Netherlands and Sweden does more than half the population feel that other people are generally to be trusted.

Trust in institutions. To measure trust in institutions, the panel was asked the following question: *How much do you trust (name of institution)?* Respondents were

Chart 4.5 Interpersonal trust (2000)

Percentage of people per country who feel that, generally speaking, most people can be trusted (2000)



asked to tick any of four answers: *A great deal, A fair amount, A little*, or *Not at all*. Charting the development of trust in Dutch parliament since 1981, Chart 4.6 shows the Dutch to be less trusting in 2005 than they were in previous surveys: only one in three respondents said they had 'a fair amount' or 'a great deal' of trust in the country's parliament, while a striking 20% said it did not trust parliament at all – a quadrupling of the 1999/2000 score and a doubling vis-à-vis 1981.[8] Here, too, we need to keep in mind the distortions caused by the differences in approach between the Values Survey and the DNB Household Survey (Internet, anonymous, panel) and the slightly different make-up of the sample (slightly better educated on average). The Social and Cultural Planning Office of the Netherlands (2005) notes that the percentage of Dutch people that trust the government declined from 75% in 2000 to 48% in 2004. International comparisons show that Europeans have less faith in politics than their counterparts in Canada and the United States. This leads Teulings, Bovenberg and Van Dalen (2005) to observe that 'Europeans may fear American-style conditions, but the Americans themselves are obviously less fearful.'

We also enquired after the people's trust in the police, the reason being that we were curious to find out whether the declining trust in parliament might reflect a general loss of trust in authorities. As Chart 4.7 shows, despite the debate about public safety in the Netherlands, trust in the police merely edged down between 1981 and 2000 and was even found to have risen vis-à-vis 2000 in the DNB Household Survey in 2005. Possibly, people feel the police to be closer to them than politicians or the EU, which might mean that the campaign for more police on the beat has left its mark. Another possibility is that police action is seen to be predictable and consistent. People may not actually like the police to be predictable and consistent when ticketing minor speeding infringements, but predictable and consistent

Chart 4.6 Trust in parliament

How much do you trust parliament?

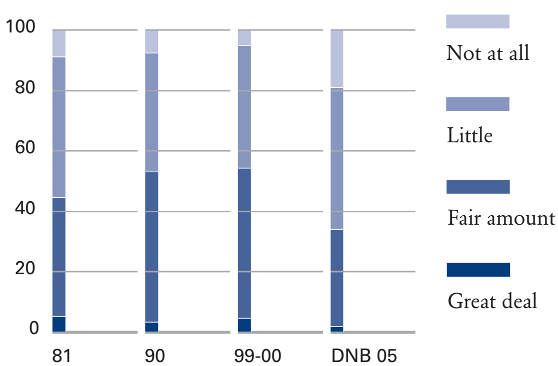
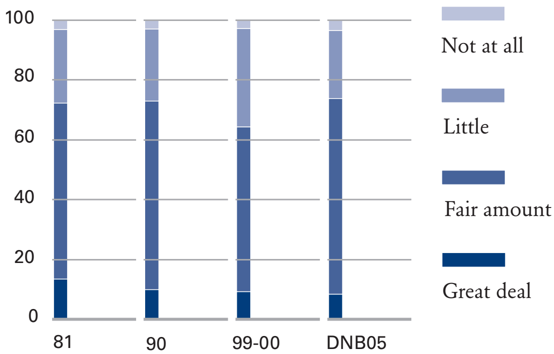


Chart 4.7 Trust in the police

How much do you trust the police?



behaviour does contribute to trustworthiness. In the 2000 international comparison, the Netherlands matched the average for EU countries' trust in the police.

During the years 2002 – 2006, radical changes were made to the Dutch social security system. This is the presumable reason for a slump in public trust. Chart 4.8 shows the percentage of Dutch people who claim to have 'a great deal' or 'a fair amount' of trust in the system to have plummeted from around 60% in 2000 to some 25% in the summer of 2005.

The European Values Study has been surveying trust in the European Union (EU) since 1990. Chart 4.9 shows this trust to have fallen steeply in the last decade of the twentieth century, with the DHS survey observing a further decline.

An international comparison shows Dutch trust in the EU to be low in both

Chart 4.8 Trust in the social security system

How much do you trust the social security system?

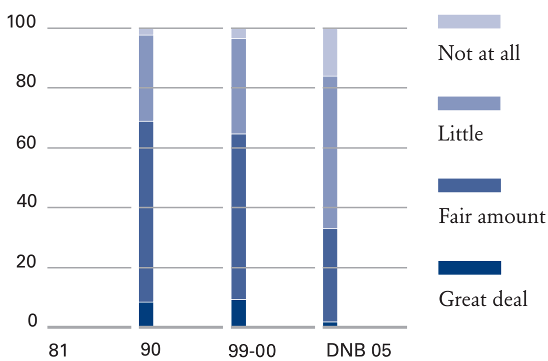
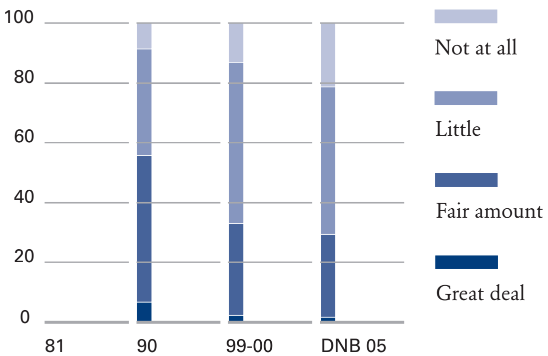


Chart 4.9 Trust in the EU

How much do you trust the EU?

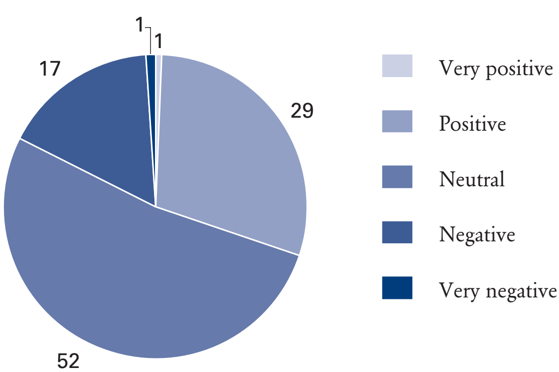


absolute and relative terms. In 2000 the Dutch population displayed the lowest level of trust of all countries that have formed part of the European Union and its predecessors from their inception (Halman, Luijkx and Van Zundert 2005).[9]

We asked the DHS panel one additional question on the subject of trust: *Do you trust the integrity of business in the Netherlands?* Our enquiry into the way the Dutch feel about the integrity of their businesses is important because of the accounting and other scandals of the past few years (building fraud, insider trading, share-leasing schemes). As Section 2 demonstrated, confidence in the economy (consumer confidence) does not hinge on 'rational' economic factors alone, and we cannot

Chart 4.10 Integrity of business

Percentages



rule out in advance concerns about the integrity of corporate Holland. Nearly one in five Dutch people takes a negative or very negative view of the integrity of business, with around half neutral and less than one-third positive to very positive (see Chart 4.10).

4.3 **Summary**

In 2005, the Dutch were fundamentally bearish about the economy in general, but quite upbeat about their own financial situations. 'I'm doing OK, but we're doing badly,' seemed to be the message. A mixed picture emerges for indicators of trust: the Dutch may show a high and still rising level of trust in their compatriots in international terms, but their trust in institutions and broader civic organisations – and in politicians in particular – has been crumbling.

5 Trust in the financial sector, its supervision and the euro

This section takes an in-depth look at trust insofar as it directly impinges on DNB's terms of reference. Its key subject is trust in the financial industry and its supervision, and in the euro. Our research again draws on the CentERpanel surveys conducted at the end of 2003/in early 2004 and in the summer of 2005. Our discussion focuses on both public trust in general and on its individual determinants.

5.1 Trust in the financial sector and its supervision

DNB monitors financial stability and the health of financial institutions, and these two core duties inform this section on public trust in the Netherlands' financial institutions – banks, pension funds and insurers – and in the financial industry at large. This particular subsection will present and analyse recent research findings concerning trust in the financial sector. A survey was conducted in December 2003/January 2004 to uncover to what extent the Dutch public trust the country's financial institutions and their supervision, and what individual characteristics influence this trust. Key areas of investigation include trust in the health of financial institutions and in the trustworthiness and integrity of their executive officers, as well as trust in the quality of supervision imposed and enforced by DNB.

After reviewing the aggregated data, we will analyse in some greater depth the degree to which trust is linked to objective individual characteristics such as education, income, age and class, as well as to subjective characteristics, e.g. the degree to which people trust others in their own environment.

Confidence and trust in banks, life insurers and pension funds. The DNB Household Survey of December 2003/January 2004 found that over 90% of the Dutch population has confidence in the Dutch banking system at large. In the twelve months leading up to the survey, only 15% had ever considered the possibility that banks in the Netherlands could go bankrupt. Around half of the population fully trust that their own bank will be able to pay up their money at all times (Chart 5.1), while another 45% are broadly confident. Trust in life insurers runs equally high (Chart 5.2), with a majority of policyholders fully or broadly trusting that their insurers will honour their commitments in the future. Confidence in pension funds in the Netherlands is lower (Chart 5.3). Admittedly, 74% of future pension beneficiaries are broadly

Chart 5.1 Trust in own bank

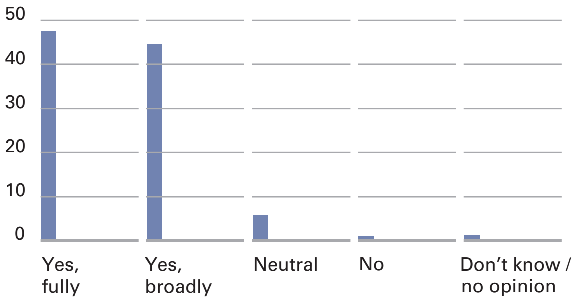


Chart 5.2 Trust in own life insurer

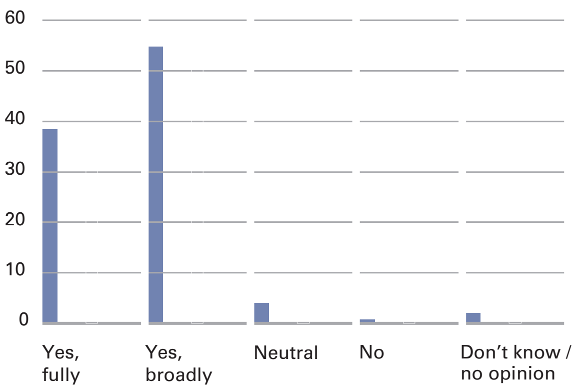
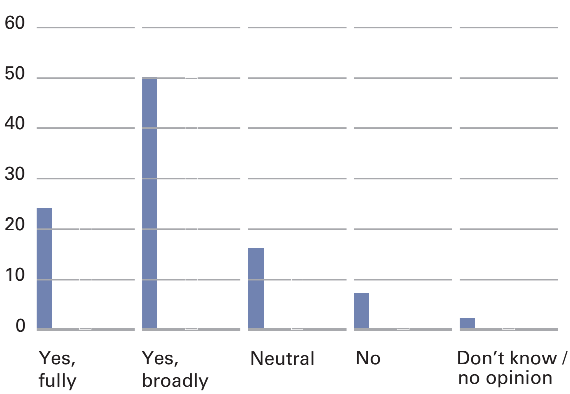


Chart 5.3 Trust in own pension fund



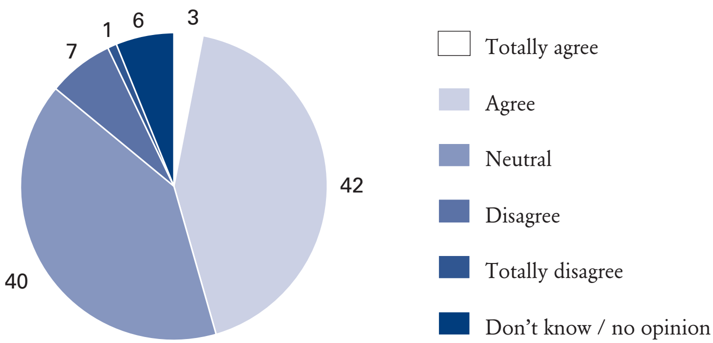
confident that their pension funds will be able to pay their pensions in due course, but in 2003 more than one in three pension scheme participants had their doubts as to whether their pension funds would be able to meet their commitments. As we will see, confidence in pension funds is age-related: the older the respondent, the fewer the doubts.

Altogether, then, trust in financial institutions is high. And yet, in 2003 7% of respondents had some concerns that their bank or banks would not be able to stump up, and 17% of this group – 1.4% of the total Dutch population – had acted on these doubts and transferred to another bank. One in five doubters had gone so far as to seek information but had decided to leave their money where it was. Of the people who did not have any concerns, 62% said they would withdraw their money if information or rumours about their bank's reliability caused them to have any doubts. This suggests that a loss of trust would trigger a massive run on the banks, a major impact that would appear liable to be triggered even by a mere suspicion of unreliability – making trust in banks a very vulnerable variable indeed. Some reservation is called for: a gap often exists between what people say they will do and what they actually do, and it is questionable whether so many would indeed snap into action.

The survey asked the following question about trust and executive officers of financial institutions: Do you trust the competence and integrity of the executive officers of financial institutions? Of course, this particular question carries additional weight for DNB, if only because of its regulatory duties and the supervision of executive officers of financial institutions that is part of its remit. Competence and integrity of their executive officers are a key precondition for banks to obtain and keep their licenses to run their banking business – a condition that does not apply to non-financial institutions, which typically have no regulatory body supervising them. This is not surprising, really, considering that the financial system is what keeps the economy's circulation pumping. About 45% of the Dutch are reasonably or very confident about the competence and integrity of executive officers of financial institutions (Chart 5.4), with a large proportion of respondents reporting themselves to be neutral (41%) or not to know (6%), and only 8% rating these executive officers incompetent and/or lacking in integrity. These showings compare favourably with integrity scores for corporate executive officers: no fewer than one in five Dutch people have doubts about the integrity of business in general (see Section 4). This ascertains the importance of sound standards for corporate governance.

Trust in the supervision of the financial sector. Appropriate regulation and supervision of the financial industry is one way to ensure continued confidence in financial institutions, and this is one of DNB's key responsibilities. An overwhelming majority of Dutch people – around 90% – feel that banks, pension funds and insurers in the Netherlands should be regulated and supervised. Trust in DNB, responsible for supervising the health of all of the country's financial institutions and its financial

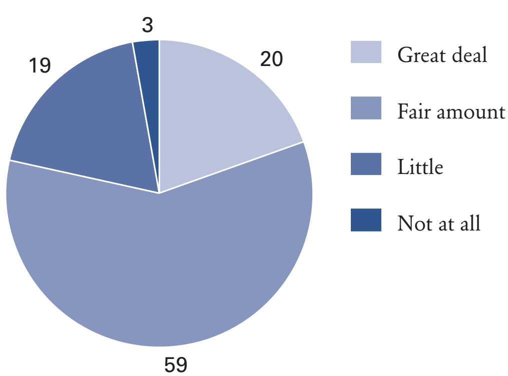
Chart 5.4 Trust in the executive officers of financial institutions
Executive officers of financial institutions are generally competent and above reproach. Percentages



stability, runs high: one in five of the Dutch has a 'great deal' and three in five a 'fair amount' of trust in DNB (see Chart 5.5). High as these ratings may be, this still means that over 20% do not trust DNB, or only a little. This is important, as we will find later that greater trust in DNB typically implies greater trust in the country's financial institutions, which in turn bolsters confidence in the economy. What is more, trust in DNB, as we will discover, has a positive effect on confidence in the euro. Section 6 will return to these issues in some greater depth.

Trust after bank failure. In December 2005, a small bank in the Netherlands failed. It was the first bankruptcy in the Dutch banking sector in about 25 years, and hence it

Chart 5.5 Trust in DNB
Do you trust DNB? Percentages



came as a considerable surprise to the public. To study the potential trust implications of this bank failure, in February 2006 we submitted a second questionnaire to the DHS panel, repeating the previous questions about trust in the financial sector and in DNB without reference to the recent failure. Our results indicate that despite extensive media coverage, the failure had not had a significant impact on trust in either individual banks, the system as a whole or DNB as prudential supervisor.

5.2 Trust in the euro

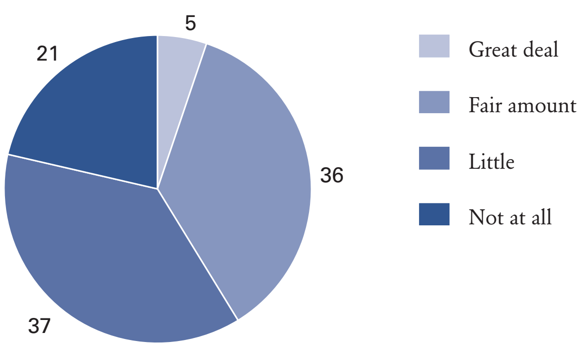
Chart 5.6 captures the state of Dutch trust in the euro in mid-2005, i.e. after press reports about the value at which the guilder had joined the euro and the referendum on Europe's constitution. A majority of around 60 % has little or no confidence in the single currency, with over one in three expressing a 'fair amount' and five % 'a great deal' of confidence, reflecting a widespread feeling in the Netherlands that the euro has caused higher inflation and a loss of purchasing power. A recent opinion poll suggests that the Dutch overestimate inflation by a wider margin if the question includes the word 'euro' (Christensen, Van Els and Van Rooij 2006).

5.3 Summary

This section has reviewed confidence and trust among the Dutch as directly linked to De Nederlandsche Bank's remit. In view of the low – and declining – indicators of institutional trust as described in the previous section, the high level of trust in banks, insurance companies and pension funds would, at first glance, appear rather striking.[10] Ratings of executive officers of financial institutions are also remarkably

Chart 5.6 Trust in euro

Do you trust the euro? Percentages



good when compared with the scores on integrity of business. Deeper reflection suggests that, really, no other outcomes would be possible. High trust is the very mainstay of the financial industry, and there might not be a financial industry at all if these were absent. Over half those interviewed said they would withdraw their money from their banks in the event of reliability worries, even if these concerned the bank's insurance operations. Solid financial supervision is exceedingly important, and the Dutch would seem to trust DNB to do its job – a resounding 80% reported a great deal or a fair amount of trust in DNB. It is not merely interesting that DNB commands so much more trust than do other institutions, it is essential that it should do so, because it can only properly carry out its confidence-generating and trust-inspiring responsibilities on the strength of its own solid reputation. The next section will investigate the personal characteristics that come into play in confidence and trust.

6 Confidence and trust in the Netherlands: a closer analysis

This section studies the objective and subjective determinants of a number of variables of confidence and trust at an individual level, which, if appropriate, would help to develop policies that target specific groups. Our analysis draws on the CentERpanel surveys of December 2003/January 2004 and July/August 2005. Given the type of data analyzed, we have applied ordered probit regression analysis.[11] As far as the explanatory variables age and education are concerned, we have run regressions both with dummies for each category separately, and with age and education ordered from low to high. Both types of regressions gave similar results; here we present only the latter regressions (see below, Tables 6.1 and 6.2).

6.1 Determinants of confidence

We begin by investigating a number of factors that may influence confidence in the state of the Dutch economy. As we said in Section 5, we measured this confidence by asking CentERpanel members: *How would you currently rate the economic situation in the Netherlands?* Aiming to gauge the public's confidence in a development or trend, this question is not identical to consumer confidence as measured by Statistics Netherlands, but we do take the answers to be an indication of the confidence people have in the development of the Dutch economy. Our interest here is in what individual characteristics influence people's assessment of the economic climate, and particularly in whether trust in institutions has any part to play.

Closer analysis of survey findings reveals that confidence in the state of the Dutch economy ties in with a number of objective individual characteristics. Table 6.1 presents three regression results for confidence in the economic climate. The first column includes objective background characteristics. As this column shows, income has a positive effect on confidence in the Dutch economic climate, and education does not. Confidence falls with age, and women are less confident than men. The gender effect is found in the trust variables too (see next subsection). Our analysis also shows that labour market position is significant: people on benefits have significantly less confidence.

Table 6.1 Determinants of confidence[12]

	Column 1	Column 2	Column 3
Explanatory variables	Confidence	Confidence	Confidence
Age	-0.048**	-0.26	-0.066**
	(-2.5)	(-1.10)	(-2.48)
Female	-0.25**	-0.23**	-0.26**
	(-4.3)	(-3.17)	(-3.21)
Education	0,024	0.033	0.013
	(1,27)	(1.41)	(0.51)
Income	0,037**	0.016	0.018
	(0,017)	(0.76)	(0.75)
On benefits	-0,24*	-0.14	-0.16
	(0,10)	(-1.11)	(-1.14)
Trust in executive officers of financial institutions		0.14**	0.088*
		(3.27)	(1.81)
Trust in corporate integrity		0.31**	0.30**
		(5.95)	(4.95)
Trust in parliament		0.068	0.058
		(1.55)	(1.17)
Optimism			0.09**
			(2.76)
Observations	*2076*	*1454*	*1147*
Pseudo R2	*0.016*	*0.049*	*0.051*

Ordered probit regression. * significant at 10% level, ** significant at 5% level. Z-values in parentheses.
Note: Respondents answering 'don't know' are excluded from the regressions. As a result, the number of observations is lower if more subjective background variables are added.

To find out whether confidence in the Netherlands is influenced by trust in the country's institutions, column 2 of Table 6.1 adds various trust measures as explanatory variables. As column 2 indicates, trust in the integrity of business and in the competence and integrity of executive officers of financial institutions significantly contributes to confidence. The effect of objective background characteristics disappears, with the exception of gender. Note that the number of observations in column 2 is lower than that in column 1. This is because 'don't knows' are excluded from the sample, and these are more frequent for subjective background characteristics.

A third factor might explain the link between people's trust in the competence and integrity of business and executive officers of financial institutions and confidence in the state of the Dutch economy. Income would be a prime candidate here. After all, income disappeared as a relevant background characteristic as soon as trust variables were factored in. Another possible third factor effect may be that pessimists tend to have both little trust in others and institutions and little confidence. To allow for this, we asked DNB Household Panel members to what extent they would describe their personalities as pessimistic or optimistic by assigning a rating on a scale of 1 ('very pessimistic') to 7 ('very optimistic') and run a regression adding this variable (column 3 in Table 6.1). Of course, being an exercise in self-assessment, this raises the question as to how reliable these data are. Economists tend to prefer revealed to stated preferences, as respondents may provide answers that do not match their true natures or views. However, academic research has shown time and again that self-declared preferences paint a reliable picture. Kapteyn and Teppa (2002) and Van Rooij, Kool and Prast (2004) found 'self-declared' risk appetite to be a good predictor of economic behaviour. For instance investors claiming to be more risk averse typically have fewer equities and more bonds in their investment portfolios and make other choices that confirm high risk aversion. Adding a self-declared optimistic or pessimistic nature to the explanatory variables identified, we find that someone's basic nature is indeed a significant factor in their confidence in the economic situation in the Netherlands. Self-declared pessimists display significantly less confidence. That said, as column 3 in Table 6.1 shows, the inclusion of this variable does not in any way preclude trust in the integrity of business from having a significant effect on confidence in the economy. The significant effect of trust in the competence and integrity of executive officers of financial institutions also remains unchallenged. One striking change that results from including the optimism indicator is the disappearance of the effect of being on benefits. This might suggest that people on benefits are more pessimistic by nature.

Harking back to the World Values Survey question – *Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people* – we reviewed whether trust in others had an effect on confidence in the economy. Although we did not find this to be so, if we strip out all other trust variables, then this social capital gauge does show an effect. In this case, too, the effect of being on benefits disappears (as it did in column 2 of Table 6.1). This finding suggests a negative correlation between interpersonal trust and relying on benefits. Cause and effect are not immediately obvious: do people on benefits acquire a pessimistic attitude or are people with a pessimistic take on life more likely to end up on benefits? The available data do not provide any easy answers, and, in any case, this question is beyond the scope of this study.

Our results reveal that the young are typically more confident. This might be attributable to their longer time horizons: they can afford a more optimistic view of future economic conditions because their working lives may yet take many different turns. As cognitive psychology has demonstrated, people tend to overestimate their own opportunities and qualities (Prast 2004b). As long as people have not reached the age at which they will obviously never achieve their earlier ambitions, they may take a more bullish view of the economic situation. Research among first-year students of economics in the Netherlands reveals that, on average, they expect to take less time to finish their studies, to achieve higher grades and to end up in better-paid jobs than is actually the case for the average student of economics (Oosterbeek 1992; Leuven, Oosterbeek and Van der Klaauw 2004). This might also explain why (see section 6.3 below) the young do not have more trust in institutions than the old: trust has to do with the present and is not related to one's personal outlook.

Men display higher levels of confidence than women. This, too, may be attributable to an inclination to over-assess one's abilities, which men are known to do more than women (Barber and Odean 2001). Being more competitive and career-oriented may also play a part, as may the desire to take control of one's own life. Psychological research has shown money and dealing with money to be associated with vigour and enterprise for men, whereas women often see money as something that happens to them or not (Prince 1993). Confidence being stronger in people with high incomes than in those with lower incomes may reflect the wider variety of opportunities, greater independence and greater control of the economic future that a higher income affords. Interestingly, a recent DNB study discovered that higher incomes do make people happier, but that greater wealth does not (DNB 2005a).

Our analysis also shows confidence in the economy to be lower in people on benefits. This finding may reflect a sense of dependence on the government and the rules it imposes – a dependence that is likely to be all the more keenly felt in periods when social security schemes are being challenged and debated, as they have been in the Netherlands for some time.

A positive correlation between confidence and trust also emerges. People who express more trust in the competence and integrity of executive officers of financial institutions and in the integrity of business, also report more confidence in the economic situation in the Netherlands. This effect remains even if we include an optimism indicator in our analyses. Admittedly, optimism as a subjective personal characteristic does influence confidence in the state of the Dutch economy, but this does not detract from the link between trust and confidence. To date, as far as we know, virtually no research has been done on the relationship between confidence and trust, which deserves closer scrutiny.

6.2 Determinants of trust in institutions

A second line of enquiry we have pursued is to investigate on what, at the individual level, trust in Dutch institutions depends, with a focus on institutions that directly touch on DNB's duties: the financial industry and its supervision, DNB itself, and the euro. In addition, we have reviewed the determinants of trust in the integrity of business, and, for background purposes, we will start off by looking at the determinants of trust in parliament.

Trust in parliament. Column 1 of Table 6.2 shows that income has a positive effect on trust, and that people on benefits report lower trust. Moreover, the subjective variable of interpersonal trust proves a significant force here: people who trust other people also report more trust in parliament as an institution. We will see this particular variable – interpersonal trust – crop up frequently as an explanatory factor for trust in institutions. Incidentally, the same applies to being on benefits.

Trust in DNB. As recorded earlier, four in five Dutch people report a 'fair amount' or a 'great deal' of trust in DNB. Column 2 of Table 6.2 reveals that older people put greater trust in DNB than young people, those with higher incomes more than those with low incomes, and men more than women. People on benefits are found to trust DNB less, and the interpersonal trust variable is also significant: people who put more trust in their fellow humans also trust DNB more. Trust in DNB ties in with trust in parliament, an effect that comes in ahead of the optimism indicator and the interpersonal trust variable.

Trust in the integrity of business. As the third column in Table 6.2 shows, trust in the integrity of business is negatively correlated with age, positively with income but not education, and men display greater trust than women. Optimists also report greater trust in the integrity of corporate Holland. Being on benefits has no effect, unless we strip out the optimism indicator as an explanatory variable – again confirming the robust correlation between these two variables. Add the subjective variable of interpersonal trust and a significant effect emerges, whereas the age effect disappears. (Although closer analysis does not suggest that older people trust others less than do young people). Trust in parliament is again found to be a significant factor, and its effect comes on top of the optimism indicator and interpersonal trust. This suggests that the Dutch public feel parliament to be capable of influencing the integrity of business.

Trust in executive officers of financial institutions. Column 4 in Table 6.2 shows that gender, education and income have an effect on trust in the executive officers of financial institutions. Women report lower trust in the executive officers of financial institutions than men, income has a positive effect, but there is a negative correlation with education: the higher educated are more cynical or, if you like, less naïve about the behaviour and intentions of the top management of financial institutions. At the same time, people who know about banking supervision display higher trust. This suggests that the public believe that supervision of the financial sector will benefit the quality of the executive officers running financial institutions. Both the optimism indicator and interpersonal trust have a positive effect. People on benefits report lower trust in the competence and integrity of the executive officers of financial institutions, but again, this effect only applies if we strip out the optimism indicator as an explanatory factor. A thought-provoking finding is the significant relationship between trust in the competence and integrity of the executive officers of financial institutions and trust in parliament. Awareness of DNB's existence and of its supervision of banks, insurers and pension funds shows a positive correlation with education and income.

Trust in banks, life insurers, pension funds. Column 5 of Table 6.2 shows that people's trust in their own banks is not affected by the objective factors of age and gender, but depends negatively on education, suggesting again that the higher educated are more cynical or less naïve about the possibility of a bank failure. Trust in the bank where one is a client is not affected by the optimism indicator and trust in others. Awareness of the existence of banking supervision does matter, though: respondents who are aware of banking supervision report significantly higher trust in their own banks. Column 6 shows that trust in the own life insurance company benefits from an awareness of supervision and trust in DNB, as this increases respondents' conviction that their insurers will honour their life policies at all times. As Column 7 indicates, people with an awareness of pension industry supervision and trust in DNB are more likely to believe that their pension fund will meet its obligations. Unlike trust in banks and insurers, trust in pension funds is influenced by the objective characteristic of age. Trust that a pension scheme will indeed pay up increases with age. In other words, the younger the respondent, the more likely they are to believe their pension entitlements might be tinkered with. This is hardly surprising in view of the current debate about the sustainability of the Dutch pension system, constraints on index-linking and the possible changeover to defined contribution schemes, collective or otherwise. Trust in parliament also proves a significant factor, which is surprising because supervision of banks, insurers and pension funds has been delegated to DNB, and DNB operates at a remove from politicians – despite the debate that has recently flared up about the need for supervisors to be accountable to parliament.

Trust in the euro. In-depth analysis of trust in the euro shows people with higher incomes, the higher educated and those with greater trust in DNB to have significantly more trust in the euro (Column 8 in Table 6.2). Irrespective of their income level, people on benefits are clearly less taken with the single currency, while age and gender are found to have no bearing on trust in the euro. In a previous study, Van Everdingen and Raaij (1998) discovered that a higher score on national identity (i.e. nationalism) had an adverse effect on euro attitudes, while perceived macroeconomic and microeconomic expectations of the euro were a positive factor. This would suggest more of an emotional than a rational economic explanation for aversion to the euro. Trust in parliament is also significant for trust in the euro, with the subjective variables of interpersonal trust and the optimism indicator likewise playing a part.

Table 6.2 Determinants of trust

	Column 1	Column 2	Column 3	Column 4
Explanatory variables	Trust in parliament	Trust in DNB	Trust in corporate integrity	Trust in executive officers of financial institutions
Age	-0.15	0.053**	-0.10**#	0.027
	(-0.63)	(2.16)	(-4.06)	(1.09)
Income	0.049*	0.068**	0.078**	0.054**
	(2.26)	(2.99)	(3.37)	(2.31)
Education	0.001	-0.006	-0.045*	-0.65*
	(0.05)	(-0.23)	(-1.79)	(-2.53)
Female	0.014	-0.17**	-0.28**	-0.18**
	(0.19)	(-2.25)	(-3.59)	(-2.27)
On benefits	-0.51**	-0.16	-0.032	-0.23*##
	(-4.00)	(-1.23)	(-0.25)	(1.74)
Optimism	-0.001	0.052*	0.11**	0.076**
	(-0.04)	(1.74)	(3.55)	(2.48)
Interpersonal trust	0.42**	0.35**	0.15**	0.13*
	(5.85)	(4.72)	(2.01)	(1.75)
Trust in parliament		0.37**	0.34**	0.20**
		(0.047)	(7.20)	(4.03)
Knowledge about financial supervision				0.18**
				(3.61)
Trust in DNB				0.24**
				(4.84)
Knowledge about DNB				
Observations	*1147*	*1147*	*1147*	*1147*
Pseudo R2	*0.027*	*0.068*	*0,060*	*0.053*

Ordered probit regression. * significant at 10% level, ** significant at 5% level. Z-values in parentheses.
The effect of this variable disappears when interpersonal trust is added to the equation.
The effect of this variable disappears when the optimism indicator is added to the equation.

Column 5	Column 6	Column 7	Column 8
Trust in own bank	Trust in own insurer	Trust in own pension fund	Trust in euro
-0.044	-0.13	0.30**	-0.031
(-0.77)	(1.15)	(4.97)	(-1.28)
0.091	-0.008	0.065	0.060**
(1.43)	(-0.11)	(1.21)	(2.70)
-.12*	-0.066*	0.056	0.75**
(-1.89)	(-0.68)	(1.05)	(3.03)
-0.19	0.14	-0.19	-0.15**
(-1.06)	(0.50)	(-1.25)	(-1.96)
			-0.29**
			(-2.23)
0.10	0.25**	0.093	0.069**
(1.59)	(2.49)	(1.53)	(2.28)
			0.26**
			(3.42)
0.13	0.089	0.37**	0.62**
(1.19)	(0.53)	(3.72)	(12.7)
0.30**	0.43**	0.26**	
(3.01)	(3.07)	(2.89)	
0.36**	0.31**	0.17*	0.35**
(3.03)	(1.77)	(1.61)	(7.02)
0.28	0.30	-1.0	
(1.59)	(1.10)	(-0.58)	
571	*264*	*407*	*1147*
0.10	*0.15*	*0.12*	*0.15*

Note: the questions regarding knowledge about DNB and the existence of financial supervision are submitted to only half the total panel. Moreover, the 'don't know' categories are excluded from the regressions. As a result, the number of observations falls if these variables are added to the regression (notably in columns 5, 6 and 7). Also, the trust in insurance question was relevant for respondents with a life insurance only (less than 50% of respondents), hence the low number of observations in column 6.

Having weighed all factors, variables and characteristics, our analysis produces the following picture of trust in institutions. Trust in parliament depends on the objective economic variables of income and position in the labour market. It would appear that people with lower incomes and benefits claimants feel under-represented in national politics. Our study also corroborates the link between interpersonal trust and trust in institutions documented in previous studies (see Section 3), not just for trust in parliament but for all other institutions we investigated: interpersonal trust invariably proves a significant positive factor. As Section 3 pointed out, it is unclear quite how the connection works: does it go from interpersonal trust to trust in institutions, or is it the result of some interplay?

Trust in DNB turns out to be related to the objective characteristics age, gender and income but proves indifferent to education. Of the subjective variables, the optimism indicator did not while interpersonal trust did weigh in. The significant correlation between trust in DNB and trust in parliament is rather surprising, given that DNB operates at a distance from politics. In terms of monetary policy, DNB is fully independent from the government – always within the parameters of the ECB's mandate and powers, of course – but in its supervisory duties DNB has the status of a semi-dependent agency. That said, the public does not appear to see DNB as separate from politics. Our current analysis does not entirely rule out the possibility of a third subjective, individual factor influencing trust in parliament and DNB, and causing the correlation. Interpersonal trust and the optimism indicator do not qualify, as these have been factored into our analysis (see Table 6.5). Some people having more – or less – faith in any and all kinds of authority is a potential third factor that springs to mind.

Whatever the explanation, trust in DNB has a positive effect on trust in the competence and integrity of executive officers of financial institutions, on trust in banks, insurers and pension funds, and on trust in the euro. As a result, trust in DNB has an indirect positive effect on confidence in the economy. We were intrigued to find that trust in banks, insurers and pension funds bears no relationship to age, education or income – a reflection of trust widely shared throughout the population. Our analysis also shows that awareness of DNB's existence and its supervision of financial institutions increases trust in these very institutions. Apparently, the Dutch public feel that regulation adds to the trustworthiness of financial institutions.

Trust in the euro reveals predictable links with people's social and economic positions and with the subjective variables of trust in DNB, optimism and interpersonal trust. Here, too, trust in parliament is the wild card. After all, monetary policy is separate from Dutch politics, and the current parliament did not even have a say in the introduction of the euro. Besides, one would expect the public to blame retailers for perceived euro inflation, but apparently they associate the national currency with the government – and parliament – of the day.

6.3 Summary

This section has demonstrated how a number of indicators of trust, particularly those touching upon DNB's policies, tie in with individual background characteristics of the Dutch and, where appropriate, has also explored any potential connection between variables. Our analysis reveals that confidence in the state of the economy depends on both objective social and economic factors and subjective variables such as individual optimism and trust in institutions. Trust in institutions in turn reflects subjective trust variables as much as objective characteristics. One thing really stands out: the recurrence of 'being on benefits' as a social and economic characteristic that has an adverse effect on both confidence and trust, regardless of income or education. We have also uncovered a connection between confidence and trust that has so far gone unnoticed in the economic literature.

Time and again we have found trust in DNB to have a positive influence on confidence in institutions that fall within its terms of reference – financial institutions and their executive officers (supervision) and the euro (monetary policy). Strikingly, trust in DNB and in these institutions showed some dependence on trust in parliament.

7 Conclusions

This study has reviewed the state of confidence and trust in the Netherlands, focusing on trust in institutions and confidence in the economy. An attempt has been made to identify the factors that determine individual trust and confidence and to uncover connections between the various variables. This is an important undertaking, as confidence and trust have been scientifically proven to be a factor of production: social capital. In other words, confidence and trust are drivers of economic growth and social well-being.

The introductory section described this study's main conclusions, and a brief recapitulation should suffice here. Interpersonal trust in the Netherlands – the extent to which the Dutch trust each other – is high from both an international and an historical perspective (based on surveys conducted over the period 2003-2006). People who trust others typically display higher trust in institutions, promoting the smooth operation of such institutions. Yet this study found the Dutch to have little trust in some of the country's institutions, i.e., the euro, parliament and the social security system. Two in three have little or no trust in parliament and close to 60% report an absence of or very little trust in the euro. The good news is the high level of trust in financial institutions and DNB, whereas trust in the integrity of business is clearly lower than in financial institutions – but still higher than in parliament.

At the individual level, a significant correlation turns out to exist between trust in parliament and trust in DNB. Trust in financial institutions and in the euro – both included in DNB's terms of reference – hinges on trust in parliament. This is rather surprising, because DNB operates at arm's length from politics in terms of monetary policy and acts as an independent agency in its supervisory duties among other responsibilities.

Our study found people on benefits to generally take a rather less favourable view of institutions and the economy in the Netherlands. This might mean that claiming social security makes people pessimistic, although we cannot rule out the possibility that a pessimistic nature reduces a person's chances in the labour market. Be that as it may, being in work appears to be a prerequisite for citizens to feel part of society.

Consumer confidence in the Netherlands has veered sharply down in the period 2000-2005, much more so than in neighbouring countries. Closer analysis of our data reveals a significant link between confidence in the economy and trust in the country's institutions. People with higher trust in institutions typically report greater confidence in the economy. This correlation, which had not previously been identified in the economic literature, only adds to the importance of trust in institutions and between people.

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Notes

1 De Nederlandsche Bank (DNB) is the central bank and prudential supervisor of financial institutions in the Netherlands.

2 There are two other ways in which stock markets influence economies. First, Tobin's q effect suggests that higher share prices allow companies to issue shares to attract cheap money for their capital spending. And, second, higher share prices boost the asset positions of both households and companies and increase their opportunities for cheap borrowing.

3 Households also invest in the stock markets through contractual savings schemes.

4 Nahuis and Jansen do not use Statistics Netherlands' index of consumer confidence, but a monthly index which is identical for all EU countries and which, like the Statistics Netherlands index, distinguishes between consumer views of the economy at large and their own personal finances.

5 The research also finds a negative – if lesser – effect on producer confidence, but in the latter index views of the general economic climate typically matter much less than the state of producers' order books, making it much less of a psychological index than consumer confidence.

6 Nobel Prize Laureate Kenneth Arrow (1999) refers to these two key aspects of trust as 'competence' for faith in someone's abilities and 'conscience' for faith in someone's integrity, values and honesty.

7 The danger being, of course, that people start putting too much faith in the regulators and lose sight of their own responsibilities. This is known as moral hazard.

8 Dutch trust in the civil service exceeded the international average five years ago (Halman, Luijkx and Van Zundert 2005).

9 The EVS puts the Netherlands in 18th place in terms of trust in the European parliament and the European Commission out of all 25 EU countries: around half of the Dutch population would seem to trust these institutions. The 2005 DHS survey did not measure this type of trust.

10 Note that these empirical results date from 2003-2006. Whether the turbulence on the financial markets of 2007 and 2008 had any impact on these trust levels is subject of future research.

11 Note, that for this type of micro data analysis, R squared values are generally rather low. See Cramer (2003).

12 Although 'confidence' and 'trust' seem to be quite stable in time, they may be driven by time dependent variables, which may lead to instability of the estimated parameters.

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