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Contents	Page no.
Commentary on the economic situation	1
Research paper -	
Are UK house prices about to crash?	3

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Lombard Street Research Ltd. 30 Watling Street, London, EC4M 9BR Tel: 020 7382 5900 Fax: 020 7382 5999 e-mail: lsr@lombardstreetresearch.com www.lombardstreetresearch.com

### Is there enough capacity in the UK economy?

#### The Treasury's assumption that output is well below trend is probably wrong

Output gap analysis guided monetary policy in the 1990s As explained in the research paper in the September 2002 issue of Lombard Street Research's *Monthly Economic Review*, "output-gap monetarism" was crucial to the UK's achievement of macro-economic stability in the 1990s. The key idea in output-gap monetarism is that the *change* in inflation depends on the *level* of the output gap (i.e., the difference between trend and actual output). (When output is above its trend level [i.e., the output gap is positive], inflation rises; when it is beneath, inflation falls; when it is on trend, inflation is stable.) As inflation was at its target level of about 2 1/2% in mid-1993, all that policymakers had to do in the rest of the 1990s was to make a judgement about the level of the output gap and adjust policy to ensure that the output gap stayed close to nil. From 1997 most of the task was delegated by the Chancellor of the Exchequer to the Bank of England.

The system has undoubtedly worked well over the last decade, but it has a major But the output flaw. It relies on policy-makers' ability to make good estimates of the output gap. gap cannot be If the trend growth rate is stable and the most up-to-date data for gross domestic observed, only product are accurate, this ought to be easy. Unfortunately, the trend growth rate estimated varies a little and GDP data sometimes have to be revised substantially. One very serious problem is that productivity growth is itself pro-cyclical. Analysts are tempted to increase their estimate of trend productivity growth (and so trend output growth) in the upturn phase of the business cycle, even though the better productivity numbers are purely cyclical. (The popular "Kalman filter" adjustment - which biases the assessment towards the very latest quarters - is particularly vulnerable here.) The result is that the output gap is under-estimated and so the scope for inflation-free expansion is over-estimated. Treasury economists made this mistake in the Lawson boom of the late 1980s, with disastrous consequences.

Treasury is assuming that there is spare capacity in the UK economy...

...but this is probably not the case

The Treasury may be making the same mistake now. The Pre-Budget Report documents proposed that output would be 1.3% beneath trend in the 2002/03 year; it also forecast that - with growth of 1 1/2% in 2002, 2 1/2% - 3% in 2003 and 3% - 3 1/2% in 2004 - output would be 1.0% beneath trend in 2003/04. On that basis the economy can afford big rises in public spending and enjoy abovetrend growth from the middle of next year. But a good case can be made that the economy is not operating much beneath trend now and that above-trend growth would lead to inflation trouble. The most obvious evidence comes from the labour market. The unemployment rate (on the claimant-count measure) was 3.1% in November, 0.1% lower than a year earlier. Union militancy in the public sector is partly due to the Government's foolish stop-go on health and expenditure spending, which has inevitably aggravated staff shortages, but the unions could not be so troublesome if the labour market had more slack. It is interesting that the Bank of England (almost certainly) disagrees with the Treasury's views. Although the Bank's Inflation Report does not give a precise number for the output gap, its comments imply far more scepticism about the room for non-inflationary growth.

**Professor Tim Congdon** 

19th December, 2002

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### Summary of paper on

#### Are UK house prices about to crash?

## Purpose of the paper

The media have been obsessed recently with the possibility of a house price crash in the UK. This paper asks whether such scare stories are overdone. It argues that prospects for early 2003 are still reasonable, although the medium term will be more difficult.

#### Main points

- \* Previous bouts of high house price inflation have preceded rises in inflation more generally. 20%+ house price inflation represents a threat to the Government's inflation target in 2003 and beyond. (See p. 5.)
- \* House prices are very high relative to average earnings, suggesting that a large correction is necessary. But, because of reductions in tax, house prices do not look especially stretched relative to disposable incomes. (See p. 6.)
- \* Low interest rates enable higher debts to be serviced quite comfortably (see p. 7), but low inflation means that the real debt burden erodes much more slowly. (See p. 8.)
- \* The ratio of mortgage debt to house values has fallen in recent years, but it is still high by historical comparison (see p. 9), which may represent some sort of threat to house prices over the longer term.
- \* Supply shortages, largely due to extensive planning restrictions, have helped push house prices higher. (See p. 10.) These conditions look unlikely to change soon.
- \* Rising house prices have been an extremely valuable offset to tumbling stock markets and have helped support total household wealth and consumer spending. (See p. 11.)
- \* There is still considerable momentum in the UK housing market and prospects for at least the first half of 2003 look good. (See p. 12.) A strong housing market usually means higher spending on "big ticket" items, which will boost consumer spending and GDP.

This paper was written by Stewart Robertson.

### Are UK house prices about to crash?

#### Some form of correction is inevitable, but does not look imminent

**Current rates of** UK house prices have more than doubled over the last six years, rising at an average annual rate of just over 13%. The pace of house price increases has house price picked up dramatically this year with the two major indices recording average inflation cannot monthly rises of 2.5% since May and registering annual inflation of somewhere continue between 25% and 30% in November. Such rates of increase are unsustainable, indefinitely and are inconsistent with the retail price inflation target of 2.5%. Over the last 50 years house price inflation has averaged 8.5%, while RPI inflation has averaged 5.9%. (See p. 5.) Despite numerous gloomy predictions since early 2001 from many economic commentators, the media and the compilers of the house price indices themselves, there are still few signs of either a major slowdown or an imminent collapse. Some of the heat has come out of the traditional hotspots in London and the South-east, but that is probably to be welcomed, comes after an extended period of strength and is perhaps little surprise given the close relationship with the fortunes of City financial services.

House prices are high relative to earnings but not when compared with disposable income

Many of the recent scare stories regarding the likelihood of a crash in property prices have focussed on the relationship between house prices and earnings. (See, for example, the May 2002 issue of the Monthly Economic Review.) The principle underlying the comparison is fairly clear. Most house purchases are funded by borrowing and the amount that banks or building societies are prepared to lend is determined largely by the salary of the borrower. It is also true that the cost of building a house (excluding the land) is largely a labour cost. If house prices move significantly out of line with earnings, there will be a greater incentive to build houses. Over the last fifty years there has been a strong tendency for the house price/earnings ratio (HPER) to mean-revert. (See p. 6.) The latest value for the HPER is comparable with that at the peak of the last housing boom in 1988/ 89, immediately before prices started to fall. One interpretation is that a similar cyclical house price fall could occur in the next few years. But there are at least two reasons for being less pessimistic. First, most (well over 50%) house purchases today are made by households with two incomes. This proportion would have been much lower in the 1960s and 1970s. The HPER takes no account of this. Secondly, the HPER ignores the impact of tax changes. The tax burden on households was reduced significantly in the 1980s and 1990s. If house prices are compared to disposable income, they do not appear anything like as out of line with historical experience.

Low interest rates mean higher debts can be serviced comfortably There is little doubt that the main reason for the current strength of the housing market is low interest rates. While rates remain low, therefore, there must be less reason to worry about a change of fortunes. Although the debt-to-income ratio is high, low interest rates have eased the debt burden considerably. As a proportion of income, regular interest payments are much lower than in the 1980s and even the 1990s. (See p. 7.) However, as the Bank of England has pointed out, low interest rates and the associated low-inflation environment imply that the *real* burden of the debt (over the life of the mortgage) will diminish much less rapidly

than it would have done if inflation were higher. (See p. 8.)

Income gearing (ratio of interest payments to income) is one aspect of household **Capital gearing** sector finances. Capital gearing (ratio of mortgage debt to the value of the housing has fallen stock or to housing equity) is another. Although this has fallen in recent years, it because of rapid is still high by historical comparison. (See p. 9.) Again, it could be argued that house price this is justified by low interest rates which imply that much higher debts can be inflation but is serviced comfortably. That may well be true, but it is worth noting that the main still high reason that the capital gearing ratio has fallen in recent years has been rapid house price inflation. If that were to fall to a more sustainable rate, then households could become more reluctant to borrow as much, perhaps putting further downward pressure on house prices.

Supply shortagesIas a result ofhplanninghrestrictions havehpushed househprices higherh

But it has not just been demand factors that have been behind the recent surge in house prices. Most housing chains involve a new house at some point. Largely because of extensive planning restrictions at national and local government level, very few houses are being built today compared with the past. (See p.10.) There are now more households than homes for the first time ever, with supply shortages concentrated in the usual problem area of London and the South-east. But shortages are widespread. The Royal Institute of Chartered Surveyors' regular survey of agents shows that, on a national basis, the ratio of house sales to properties coming on to the market is currently almost as high as it was at the peak of the last boom. Supply shortages are widely believed to have contributed significantly to the recent spike in house prices. On current trends they could continue to do so for a while yet.

Rises in housing wealth have offset share price falls and supported spending Meanwhile, house price gains have continued to offset falls in equity markets and bolster household balance sheets. Since September 2000 financial wealth has fallen by an estimated £740b. because of declines in stock markets. But tangible wealth (dominated by housing) has risen by around £600b. over the same period. (See p.11.) The ratio of total net wealth to income has fallen somewhat over the last two years, but it is still high by historical standards and generally supportive of further strong consumer spending growth. The latest value of the ratio is around 6.2, well above the forty-year average of 5 and only just below the peak of 6.6 at the end of the consumer boom in 1988/89.

A strong house market usually provides a boost to spending on "big ticket" items The current rate of house price inflation cannot be sustained indefinitely. Some form of correction is inevitable, but it does not look imminent. The pessimists who have predicted a house price crash may eventually be right. But that outcome does not look likely in early 2003. The momentum within the housing market is considerable and mortgage approvals data give a good indication of fortunes over the next three to six months. (See p. 12.) The current messsage is that property transactions will remain high in early 2003 and that, as a result, consumer spending on durable goods - such an important driver of spending patterns more generally - will also stay strong. A major spontaneous slowdown in either the housing market or consumption look unlikely. On current trends 2003 should be another good year for the domestic economy.

### Retail price inflation and house prices

Bursts of house price inflation have preceded higher inflation more generally



House price inflation is currently running at between 20% and 30%, depending on which index is used. House prices have always been more volatile than retail prices but, as the chart shows, there does appear to be a link between the two. All of the RPI inflation peaks of the last fifty years have been preceded by bursts of house price inflation. RPI inflation reached highs in September 1975, May 1980 and October 1990. The corresponding earlier peaks in house price inflation were in early 1973, mid-1979 and late 1988/early 1989. But even the smaller ups and downs in house prices have foreshadowed movements in RPI inflation. The explanation is simple. A strong housing market boosts household wealth, stimulating consumer spending indirectly, as well as leading directly to higher expenditure on "big ticket" items. (See p. 12.) Booming consumer spending then often leads to higher inflation more generally as output moves above trend. The message today must be that higher RPI inflation is a threat in 2003 and beyond.

### House price to earnings ratios

#### House prices are high compared to earnings but not to disposable income

Top chart shows ratio of average house prices to average earnings. Bottom chart shows ratio of average house prices to household disposable income per capita. HOUSE PRICES AND EARNINGS 5.0 4.5 Average, 1953-2002 = 3.60 4.0 3.5 3.0 2.5 2.0 1969 1973 1985 1989 1997 1953 1957 1961 1965 1977 1981 1993 2001 HOUSE PRICES AND DISPOSABLE INCOME PER CAPITA 6.0 5.5 5.0 Average, 1953-2002 = 4.20 4.5 4.0 3.5 3.0 1953 1957 1961 1965 1969 1973 1977 1981 1985 1989 1993 1997 2001 Sources: Nationwide Building Society, National Statistics, Lombard Street Research estimates

There is strong evidence that the house price to earnings ratio (HPER) reverts in the long-run to its mean value of around 3.6. Each of the three previous occasions in the last fifty years when the ratio has spiked upwards has been followed by a period of housing market weakness. The latest HPER reading is 4.8, close to the peak of 5.0 reached in 1989. UK house prices fell almost continually between 1989 and 1995. But most households buying a home today have more than one income, whereas this was probably not the case throughout the 1960s and 1970s. More importantly, steep falls in the burden of tax on UK households mean that houses are much less over-valued when compared with disposable incomes. In the middle of 2002 the house price to post-tax income ratio was just 7% above its long-term average. The HPER, by contrast, was 30% higher than its fifty-year average.

### Income gearing and affordability

Debt-to-income has risen steeply, but low interest rates have eased the burden



The 1980s saw a huge increase in household indebtedness. As a proportion of disposable income, total household liabilities rose from 55% in 1980 to 112% by 1990. Debt-to-income fell slightly in the 1990s, but has been rising again at an accelerating rate since 1997, driven primarily by low interest rates, which have also eased the burden of debt considerably compared with the 1980s. Mortgages accounts for around three-quarters of total debt, so servicing costs will remain affordable as long as mortgage rates stay low. Base rates doubled between 1988 and 1989, crippling the finances of many first-time buyers, just as house prices started to fall. A similar chain of events does not look likely in 2003 or 2004, but the higher overall quantity of debt means that even a relatively small increase in interest rates would have an adverse impact on affordability. Moreover, as the Bank of England has pointed out, annual interest costs are only part of the story. (See p. 8.)

### Debt burdens and affordability

#### Low inflation means low interest rates but less erosion of the real debt burden

Chart shows the ratios of debt to income and interest payments to income under different inflation assumptions. In the low inflation (2.5%) case, incomes are assumed to rise by 4.5% a year and average mortgage rates are 5%. In the high inflation (10%) case, incomes grow by 12% and mortgage rates are also assumed to be 12%. In both cases the calculations assume a borrower on average earnings taking out a 90% loan on an average prices house. House prices are assumed to rise in line with earnings.



Much has been made of the fact that average mortgage interest payments are much lower today than they were in the past. Borrowers will find larger loans affordable in terms of debt service costs. While this is undoubtedly true, low interest rates have been possible because of lower inflation. But, as the MPC points out, some buyers may not have "appreciated the persistence of the real burden of mortgage borrowing implied by the slower fall in the real value of the principal in a world of low inflation." (*Minutes of November 2002 meeting.*) The chart above attempts to illustrate this. In the early years of a 25-year mortgage, low interest rates (low inflation) imply much lower interest payments relative to income. But after nine years or so, payments in the high-inflation scenario would actually be less onerous. More fundamentally, the debt-to-income ratio (real value of debt burden) falls much more slowly in the low-inflation case. The implication may be that some problems are being stored up for later by excessive borrowing now.

### Capital gearing may be important too

The ratio of debt-to-value has declined because of rapid house price inflation



Between 1962 and 1989 the ratio of mortgage debt to the value of the housing stock fluctuated within quite narrow bounds, suggesting that there was a level of debt (relative to house values) with which the household sector was happy. The unprecedented falls in house prices between 1989 and 1995 caused this "capital gearing" ratio to soar. But since 1995 it has fallen noticeably. The surprise has been that this has been achieved because of rapid house price inflation rather than through sluggish growth of mortgage debt. Debt is still high relative to the value of the housing stock, but low interest rates (see p. 7) mean that "income gearing" is low. At present it seems income gearing rather than capital gearing is the dominant influence on mortgage demand. However, if house price inflation could change swiftly.

### Supply shortages have helped push house prices up

Planning restrictions have hindered housebuilding significantly



Most house purchase chains involve a newly-built property at some stage or other according to the Royal Institute of Chartered Surveyors (RICS). But severe planning restrictions at both national and local government level are preventing housebuilders from starting as many projects as they would like. Despite the fact that the UK now apparently has more households than homes for the first time ever, 2002 may see the fewest new homes started for over 20 years. The imbalances are greatest in London and the South-east, the areas where the population is expanding most rapidly, partly because of immigration. The RICS survey has highlighted that the ratio of house sales to the number of properties becoming available on the market is still almost as high as it was at the peak of the last housing boom in 1988/89. The chairman of the Housebuilders Federation, Mr. Pierre Williams, was recently quoted as saying that "[t]he reality is that we just need more housing and a planning system that allows it to be built".

### House price gains have offset stock market falls

#### Household balance sheet healthy and will support consumer spending in 2003



Since its peak in September 2000 the FT-All share (FTAS) index has fallen by over 40%. An estimated £700b. has been knocked off the gross financial wealth of the household sector as a result, most of it tied up with life assurance policies and pension funds. But over the same period housing wealth is estimated to have risen by almost £600b., providing a hugely important offset. Total wealth to income has fallen modestly over the last two years, but it is still high by historical comparison and is only just below the peak reached in the late 1980s. At that stage the high value of wealth to income was described as one of the major underpinnings of the consumer boom. According to Bank of England research, changes in housing wealth have a larger and more immediate impact on consumer spending over the shorter term than changes in financial wealth. One of the means by which this takes place is mortgage equity withdrawal (MEW). Bank of England data shows this reached £10.6b in Q2 and was probably higher in Q3.

### No slowdown in early 2003

#### Record mortgage approvals point to a good start next year

Top chart shows housing turnover and the number of mortgage loans arranged for house purchase. Bottom chart shows housing turnover and spending on durable goods.



Unsurprisingly, there is a close relationship between the number of mortgage loans arranged for house purchase and the subsequent volume of property transactions. Approvals are still reaching record levels each month and are currently running at levels 10% to 15% higher than a year earlier. The November *Inflation Report* described how the usual lag between approval and transaction is between ten and twelve weeks. The present momentum looks sure, therefore, to carry well into 2003. Further, the volume of housing turnover is closely related to the strength of durables goods consumption. Although durables account for only about 15% to 20% of total consumption, they are much more volatile and account for most of the variations in spending at key points of the cycle. Between 1996 and 2001 durables spending rose by 9.1% a year on average, explaining a large part of the buoyancy of overall consumption over that period. The outlook must therefore be for further strong consumer spending growth in at least the first half of 2003.