

# Malaysia: Diving or surviving?

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- ▶ **Change of view: Expecting 75bps of rate cuts from Bank Negara**
- ▶ **Malaysian economy to slow further...**
- ▶ **...but may eventually bounce back more impressively than most expect**

## Stress-testing

The fact that the economy is slowing and will continue to do so is not in doubt, but how weak growth will become, when the economy will recover and what is the likely reaction of the Central Bank are more difficult questions. As a starting point, we have tried to answer them by building a simple model of Malaysian GDP growth. This provides some surprisingly cheery news. Although year-on-year growth could slow to 4% by end-2008, it may then pick up gradually during 2009. But is this really credible given the inevitable knock-on effects of the developed world financial crisis/recession? The consensus certainly doesn't think so.

We have looked closely at three issues underpinning the model-based projections. First, will the government fulfil its plans to boost development spending significantly? Second, will the sharp fall in real interest rates have anything close to the normal beneficial effect on the economy? And third, does the collapse in business and consumer confidence herald a contraction in private investment and consumption?

The answers we reach to the first two are a tentative yes and to the third a cautious no. While the heightened requirement to be as transparent as possible may delay the spending programme, the government's desire to "make a difference" should ensure that most of it comes through in the end. Meanwhile, the banking system looks to be in relatively good shape and although weaker FDI investment and greater difficulty tapping the corporate bond market for funds are risks, they shouldn't be exaggerated. With fuel prices now dropping, consumer confidence could also continue to rebound from, admittedly, extraordinarily low levels.

Even so, we expect evidence of poor growth in 2008H2 and early 2009 to prompt Bank Negara Malaysia to cut the Overnight Policy Rate by 75bps over the next few months. We will wait until the 2008Q3 GDP release before making any changes to our growth forecasts.

# Diving or surviving?

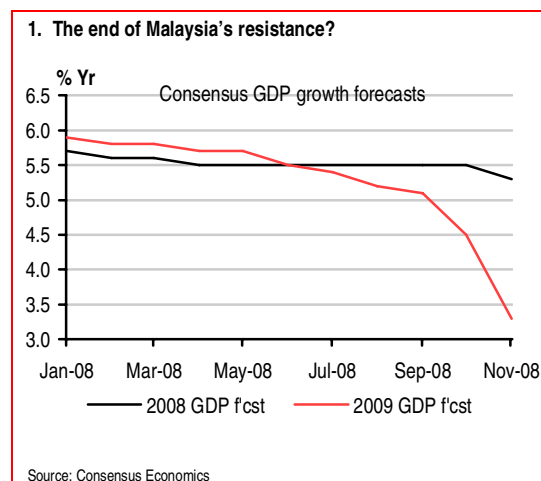
- ▶ Having remained relatively immune to the developed world slowdown in '08H1, is Malaysian GDP growth about to collapse?
- ▶ What sort of slowdown should we expect and when will the recovery begin?
- ▶ What is the likely policy reaction of Bank Negara?

## No longer immune?

At the beginning of this year we wrote about the Malaysian economy's likely immunity to the US downturn, maintaining an above-consensus 6.2% GDP growth projection for 2008 as a whole (see *Testing Decoupling: The interesting case of Malaysia*, 22 January 2008).

Since then of course the external environment has gone from bad to worse to shocking as weakness in the US economy has spread to the whole of the developed world while the biggest financial crisis since the Great Depression has emerged, spreading fear throughout the world. Surging commodity prices, which are deemed to benefit the Malaysian economy significantly, have also gone sharply into reverse now.

As such, the fact that the consensus forecast for Malaysian GDP growth in 2008 has been remarkably stable since April this year, falling only slightly from 5.7% in January to 5.3% in November (chart 1), may again speak volumes about the resilience of what is one of the most open economies in the world. Alternatively, however, it could just tell us that the consensus is far too optimistic.



In order to investigate this issue, as well as considering the prospects for 2009 growth where consensus forecasts have dropped much more sharply (chart 1), and will no doubt continue to do so, we have developed a simple model of GDP growth for the country.

## Modelling Malaysia

Our approach was to incorporate a range of possible explanatory variables such as real/nominal interest rates, commodity prices (including crude and palm oil), government development spending, indicators of external demand, equity market performance and the exchange rate in a multiple regression equation.

We eliminated those variables that were statistically insignificant and picked the model specification that not only had the best fit but was also the most parsimonious<sup>1</sup>. Table 2 shows the factors we found to be statistically significant.

## 2. Mean and variability of variables in the model

|                                      | Mean | Standard deviation |
|--------------------------------------|------|--------------------|
| GDP (y-o-y %)                        | 5.7  | 2.5                |
| Real 10yr rates (%)                  | 2.9  | 1.2                |
| Nominal 3-mth (%)                    | 3.1  | 0.8                |
| Oil (in MYR pb)                      | 161  | 83.6               |
| Oil (MYR, y-o-y %)                   | 21.8 | 31.7               |
| Palm oil (MYR, y-o-y %)              | 14.7 | 39.0               |
| Development spending (y-o-y %)       | 22.4 | 55.2               |
| US electronics consumption (y-o-y %) | 17.5 | 3.5                |
| KL Equity index (y-o-y %)            | 13.8 | 27.0               |

Source: HSBC. For each explanatory variable the period used for calculating mean and standard deviation takes into account the lag structure used in the model

We estimated the equation using quarterly data going back to 2000. Although this is not necessarily ideal<sup>2</sup>, we chose to ignore the Asian crisis period as it would have dominated the model results. Also, going back much further, say to the early 1990s, was impossible on account of data limitations for several of the explanatory variables. Nevertheless, our sample period does have a number of turning points, with the volatility of growth as measured by the standard deviation being 2.5.

There are a number of interesting observations to make about the equation itself:

- ▶ The fit of the model is good with an R-squared of 97% and adjusted R-squared of 96%. As most of the explanatory variables are lagged, we can make a two-quarter ahead projection by forecasting just one variable.

- ▶ We back-tested the model by estimating the equation until Q2 2007, then letting it forecast the following year. We found that the equation was able to replicate the growth acceleration in H2 2007 and the moderation seen in H1 2008. This gives us a reasonable degree of confidence in its forecasting abilities.
- ▶ In the equation, we tried a range of real and nominal interest rates at the short and long-end of the curve. We found that real rates dominated nominal rates at the long end of the spectrum, suggesting that economic agents care about inflation when making investment/spending decisions that are long-term in nature. For short-term decisions, the opposite is true, with nominal interest rates seemingly more important.
- ▶ In order to calculate the real long-term interest rate, one should ideally use inflation expectations to discount the nominal interest rate. However, in reality such expectations are difficult to obtain, so one can use the current headline inflation as the best guess for future inflation<sup>3</sup>. However, in the event of a sizeable exogenous shock, such as the recent food and energy price spike, the headline rate may exaggerate “true” price expectations. As an alternative, therefore, we could use inflation ex-food & energy, but this might suffer from the opposite problem. Our hunch was that inflation expectations are best represented by an average of headline and core inflation. This was also supported by the data, as nominal long yields discounted by our average inflation measure dominated real yields calculated by using either the headline or the core rate of inflation.

<sup>1</sup> This was done using the Akaike Information Criterion (AIC).

<sup>2</sup> In all we have 34 data points till Q2 2008.

<sup>3</sup> The Adaptive Theory of inflation expectations.

- ▶ We found that oil price developments have a strong bearing on Malaysia's growth performance, but perhaps not in the way that many would expect. That is, higher prices appear to dampen economic growth rather than boosting it, despite Malaysia being a major oil exporter. This is likely to reflect the negative impact of high oil prices on consumer spending and business investment behaviour, which is probably dominating the positive terms of trade effect. Additionally, given that most of the oil revenue feeds into the government's coffers, the positive effects of strong oil prices may partly be distributed in the former of higher government spending.
- ▶ Our results show that rising palm oil<sup>4</sup> prices boost economic growth – not only as a result of a rise in the terms of trade but also because of positive income effects as palm oil production tends to be fairly labour intensive – though with a long lag. The lag is possibly explained by the fact that companies are slow to pass on the benefits to the workers.
- ▶ Given the importance of exports to the Malaysian economy, we thought it worthwhile to experiment with a number of indicators such as US new orders, US consumer electronics consumption and the semiconductor book-to-bill ratio. We found that US consumer electronics consumption was the most important – presumably reflecting the importance of electronics, which make up roughly 40% of Malaysia's exports, and the fact that the US is its most important trading partner, directly accounting for 20% of the country's exports.
- ▶ The equity market was also important, and here we think two factors are at play. First, the wealth effects stemming from equity price developments, and second the fact that the market can serve as a lead indicator for growth<sup>5</sup>. Additionally, the equity variable may serve as a proxy for the impact of political uncertainties on growth.
- ▶ What was most surprising is that we could find no role for any exchange rate variable in the equation, trying the levels and year-on-year changes of the real effective exchange rate as well as the nominal effective exchange rate and the ringgit versus the USD. One reason for this might be that some part of the exchange rate effect is being picked up by the oil variables given that we converted the price into ringgits from US dollars. A second possibility is that exports are simply not that sensitive to exchange rate movements. Some support for this is given by the World Economic Forum's 2008 survey, which places Malaysia 29<sup>th</sup> out of 125 countries in a ranking of how much a country's competitiveness stems from "unique products and processes" as opposed to "low cost or local natural resources".

## The results

The fit and forecasts of the model are shown in chart 3. In making the projections, we assumed that oil prices and the equity market stabilise at current levels (around USD70 and 900 respectively at the time of writing), development spending is consistent with the government's budget plans, the real 10-year bond yield rises from a low of -1.5% in 2008Q4 to +0.8% in 2009Q4 and the growth in US consumer electronics spending bottoms at 10% in the first half of 2009 (matching the low of 2003Q1), before picking up modestly to 12% by the end of the year.

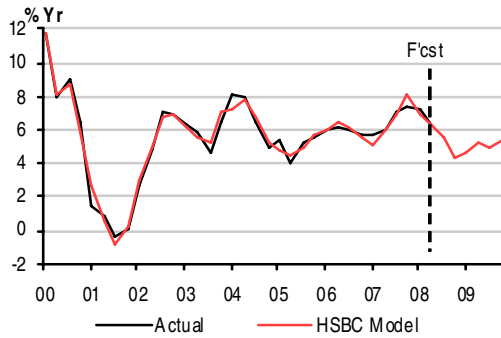
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<sup>4</sup> Palm oil makes up roughly 7% of Malaysia's exports.

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<sup>5</sup> This is true for many countries.

**3. A weak second half, but a gradual recovery in 2009?**



Source: CEIC, HSBC

The model indicates that the economy is softening sharply at present, with the year-on-year GDP growth rate potentially slipping close to 4% in the fourth quarter of 2008. It points to a year-average growth rate of 5.8%, which is actually slightly higher than the current consensus forecast of 5.3% and the government's 5.3% projection. As for 2009, the model predicts a year-average GDP growth rate of 5% - well above the 3.3% consensus forecast and government's 3.5% figure.

**Timing the recovery**

Interestingly, the equation also suggests the bottom of the growth cycle will come as soon as the fourth quarter of this year, with a modest recovery through 2009. This is at least 6 months earlier than anybody is anticipating and probably the most controversial aspect of the results. But is it credible bearing in mind that the developed world seems almost certain to remain firmly in the doldrums throughout 2009, while the financial crisis is still in full swing?

The main factors in the equation driving the growth recovery are the lagged benefits of the sharp drop in real interest rates, the fall in crude oil prices and the anticipated surge in development spending. As table 4 suggests, the impacts of these variables are typically felt relatively quickly, while, for the reasons discussed, it appears to take longer for the

economy to feel the effects of changes in palm oil prices, which only began to drop fairly recently.

**4. Malaysian growth: Impact of 1 standard deviation rise**

|                                      | Impact on year-average GDP growth |                      |                      |
|--------------------------------------|-----------------------------------|----------------------|----------------------|
|                                      | 1 <sup>st</sup> year              | 2 <sup>nd</sup> year | 3 <sup>rd</sup> year |
| Real 10yr rates (%)                  | -0.3                              | -0.8                 | 0.0                  |
| Nominal 3-mth (%)                    | 0.0                               | -0.2                 | -0.2                 |
| Oil (in MYR pb)                      | 0.0                               | -0.5                 | -0.2                 |
| Oil (MYR, y-o-y %)                   | -0.2                              | -0.5                 | -0.5                 |
| Palm oil (MYR, y-o-y %)              | 0.0                               | 0.0                  | 0.6                  |
| Development spending (y-o-y %)       | 0.1                               | 0.2                  | 0.0                  |
| US electronics consumption (y-o-y %) | 0.5                               | 0.2                  | 0.0                  |
| KL equity index (y-o-y %)            | 0.8                               | 0.8                  | 0.0                  |

Source: HSBC

We suspect the accuracy or otherwise of the equation will depend mainly on the outcomes of three issues. First, whether the planned rise in development spending is actually delivered. Second, whether banks tighten lending standards significantly, thereby blunting the impact on the economy of lower real interest rates. Third, whether confidence holds up in the face of recent global economic and financial developments.

**1. A development boost?**

The planned rise in development spending amounts to 20% in 2008 - equivalent to more than 1% of GDP - which, if delivered, would provide a meaningful boost to the economy.

Unfortunately, data for the first quarter didn't present a particularly promising picture, with expenditure broadly flat on the year, but the second quarter saw a 40% rise. This is the latest figure available.

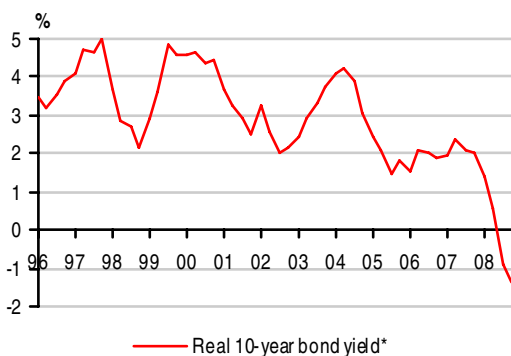
The political situation will, of course, matter here, although its impact is ambiguous. While the government will no doubt be extremely keen to deliver a sizeable spending boost as quickly as possible, there is also a heightened requirement to be as transparent as possible which could delay the process somewhat.

Our assumption is that most of the spending will indeed come through, albeit somewhat more slowly than the government has assumed. The main benefits should be felt in 2009, supporting the turnaround story.

## 2. A credit crunch?

The extremely sharp fall in real interest rates is clear to see in chart 5. Indeed, this measure of the real rate (the 10-year bond yield minus the average of core and headline inflation) has turned negative for the first time in at least 12 years.

5. Negative real rates...

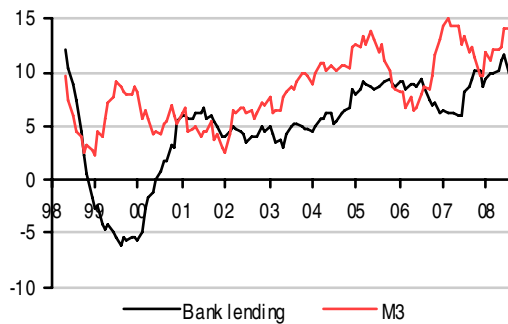


Source: HSBC, CEIC. \* Deflated by a simple average of Malaysia's core and headline CPI inflation rate

This development no doubt helps explain why bank lending growth has been strengthening since mid-2007, hitting decade-high levels in the last few months as shown by chart 6 (the data extend to August).

Clearly, therefore, banks have so far been willing to lend and companies and individuals prepared to borrow. But will this continue given potential contagion effects stemming from the huge financial crisis in the developed world?

6. ...may have helped boost bank lending growth

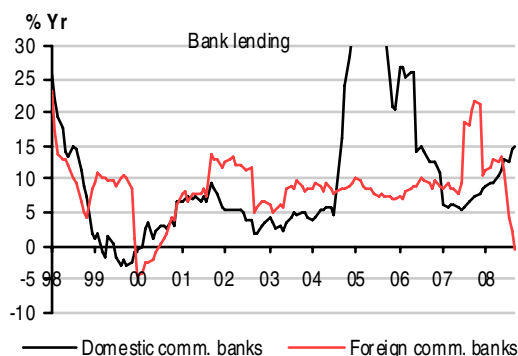


Source: CEIC

Our colleague Fred Neumann looked at this issue in detail in *Is Asia facing a credit crunch?* (18 September 2008), concluding that for Asia as a whole a credit pinch rather than a credit crunch seems the most likely outcome. As for Malaysia itself, the good news is that the banking sector enjoys a number of positive fundamentals:

- ▶ The loan to deposit ratio is less than 1, which means that banks in aggregate don't have to rely on funding from the wholesale markets.
- ▶ International banks only account for about 25% of all lending and while advances growth from these banks has slowed to zero, domestic banks have so far been prepared to pick up the slack (chart 7).

7. Lending growth from domestic banks has picked up



Source: CEIC

- ▶ Securities investments by banks as a percentage of total bank assets are the lowest in Asia at around 10%.
- ▶ The sector has negligible exposure to the US sub-prime market.
- ▶ There is no sign of stress in the interbank market, with the 3-month rate just 16bps above the overnight policy rate.

But while the domestic banking sector's fundamentals look relatively favourable, it seems sensible to assume that there will be some tightening of lending standards. There is also the risk that other important sources of funding will dry up. In particular, Foreign Direct Investment has recently been accounting for 15-20% of Malaysia's total capital spending, while local corporate bond issuance is equivalent to about 10% of investment spending (although some of the latter has been on behalf of foreign companies operating outside the country).

### 3. Confidence effects

Even if the country's economic and financial fundamentals look reasonably solid, collapsing consumer and/or business confidence, given what is going on abroad, could still see the demand side dry up. This is perhaps the biggest concern of all, as well as the most difficult to judge.

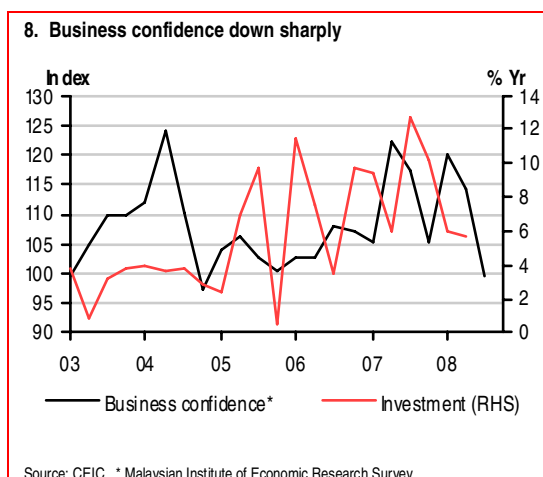
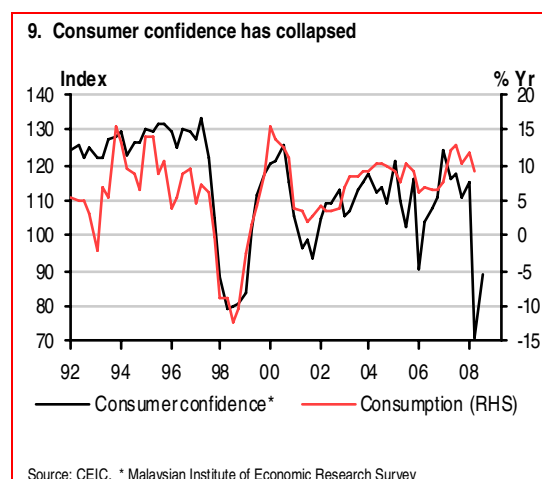


Chart 8 shows what has happened to the Malaysian Institute of Economic Research survey of business confidence. This index, which only goes back to 2003, fell sharply in the third quarter, hitting its lowest level since 2004Q3. It is, however, hard to know exactly what to make of this as the relationship with capital spending is clearly not that close. This may partly reflect the fact that the latter is heavily influenced by public sector investment trends. We have also looked at the link between business confidence and industrial production, but this too hasn't been great, particularly over the last couple of years.

The story is rather different for consumer confidence, which has both a much longer history and a closer relationship with private consumption. As chart 9 shows, confidence collapsed to its lowest ever level in the second quarter, weaker even than it got during the Asian crisis, before bouncing back slightly in Q3. In theory, the series is consistent with a huge consumption recession as well as outright declines in GDP, bearing in mind that consumer spending represents roughly 50% of the total economy.



The most likely explanations for the extraordinary fall in confidence are the much bigger and earlier than expected rise in fuel prices as well as the shock general election results and global recessionary talk.

Against this background it is tempting to believe that Malaysia is bound to experience a huge downturn in consumer spending. But while consumption growth looks highly likely to slow, all is not necessarily lost.

- ▶ There is no evidence that confidence leads consumption and while consumer spending growth slowed in the second quarter, the move was tiny in relation to the huge drop in the MIER survey.
- ▶ As for the third quarter, the only hard data of relevance we have is for motor vehicle sales which, although consistent with a further slowdown, are not disastrous.
- ▶ When fuel prices were last hiked significantly in 2006Q1, confidence also dived (albeit not to the same degree) but consumption growth held up better than one might have expected.

## Growth: All over now?

If we are honest, quantifying the exact impact on Malaysia of the developed world recession and financial crisis is far from straightforward and it is easy to miss some of the possible linkages.

It is, however, also very easy to panic in the current environment and slash forecasts possibly too far. The main point of our analysis is to suggest the risks are not all one way:

- ▶ The equation is unlikely to pick up the full benefits of the government's hugely expansionary budget which, apart from a big boost to development spending, included a raft of measures to help low-income households.
  - ▶ The net effect of the fall in oil prices looks likely to boost GDP growth rather than detract from it as many assume.
  - ▶ Real interest rates have collapsed and bank lending is growing strongly. The domestic banking sector, although not immune to what is going on elsewhere, looks to be in relatively good shape.
- ▶ The unprecedented collapse in second quarter consumer confidence has yet to be matched by private consumption and, judging by the experience of 2006, may well not be.
  - ▶ Although credit growth has picked up to some extent, Malaysia doesn't seem to have experienced a genuine credit/real estate bubble, presumably therefore reducing the chances of a subsequent bust.

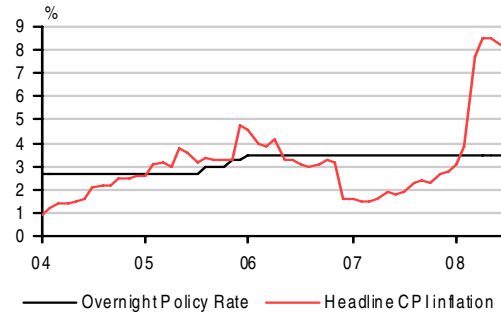
Overall, while Q3 and Q4 this year will have seen a sharp slowdown in GDP growth, we believe the risks are tilted towards an earlier and stronger than expected recovery in 2009. Our latest forecast (as published in the Asian Economics Quarterly, 9 October 2008) envisages year-average growth of 4.8%, and although this is now looking too high given the likelihood of a lower base, our next Quarterly is unlikely to see next year's growth forecast slashed to the consensus number or below. We also expect to maintain (if not raise) our 2010 growth projection, which currently stands at 5.3%.

## Policy rate implications

The likely development of economic growth looks to be the key indicator as far as the Central Bank is concerned. After all, it was prepared to look through the recent spike in inflation to a multi-decade high of 8.5% in July and August (chart 10), arguing that it anticipated a sharp slowdown in activity which in turn would prevent second-round inflation effects from materialising. In fact, Bank Negara Malaysia (BNM) was the only Central Bank in the region not to tighten monetary policy earlier this year.

As such, it is perhaps no surprise that the ongoing global and domestic growth concerns seem to have led BNM to adopt an easing bias and we now look for 75bps of cuts over the next few months. This compares with our previous view where we envisaged a further prolonged period of unchanged rates (BNM last moved the Overnight Policy Rate back in April 2006).

10. BNM chose to look through the inflation surge



Source: CEIC

Our understanding (see *BNM meeting: A haven of rate stability?*, 21 October 2008) is that the Central Bank is very keen to prevent GDP growth from slowing below 4%. And although it may now be too late to prevent this happening, BNM is probably beginning to worry that the downturn will be deeper and longer than previously thought. This in turn helps to explain why we may see growth bounce back in 2010.

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