

Economic perspectives

Scotland's economic prospects for international tourism up to 2008

by Colin Munro, Research Analyst and Ian Yeoman, Scenario Planning Research Manager, VisitScotland

Introduction

The world economy is booming, largely led by strong growth in China (with expected GDP growth of 9.1% this year (NIESR, 2004)) whilst the US economy (OEF, 2004a), is expected to have grown by 3.6% in 2004 (Cotis, 2004). Although growth slowed in the third quarter of 2004, subdued by the effects of the high price of oil, as a result of the good underlying employment prospects and favourable monetary conditions, above-trend GDP growth is again forecast for 2005 (2.9%) and 2006 (3.1%).

Within this buoyant worldwide environment, the UK economy continues to perform well, with GDP growth forecast to be 3.2% for 2004 and to remain strong through to 2006. Although house prices appear to have peaked in early 2005, a crash seems unlikely considering the underlying consumer wealth and employment prospects. The impact of high oil prices has been limited by the strength of sterling against the dollar and the fact that the UK is an oil-producing country (OEF, 2004b).

2004 was another disappointing year for the Eurozone (Gardner, 2004a), with GDP growth unlikely to exceed 1.8% in 2004 (OECD, 2004). Germany in particular is struggling in its role as economic leader, with poor domestic performance being of particular concern. Countries such as Germany which are particularly reliant on exports may find 2005 difficult as the exceptionally strong Euro and the weak dollar restrict trade prospects.

Although the US has been affected by the high price of oil, GDP growth of 4.4% is expected for 2004. Forecasts for 2005 and 2006 are for growth of 3.3% and 3.6% respectively. However these forecasts are made with the expectation that oil prices will fall back to around the \$30 per barrel mark in 2005 but if this were not to be the case then growth could be significantly less (Gardner, 2004b). The value of the US dollar has fallen by more than 30%

Opinions expressed in economic perspectives are those of the authors and not necessarily those of the Fraser of Allander Institute

against the Euro since 2002 and 20% against the Japanese yen (O'Carroll, 2004) and, as the US attempts to decrease its current account deficit, there is little doubt that the dollar will continue to slide in 2005. Central forecasts predict that world tourism arrivals and expenditure will be up again in 2004, fuelled by favourable economic conditions and a continued reduction in concerns over safety. 2005, however, may prove to be a tougher environment as the world economy returns to more moderate growth rates.

This propensity for international tourism is driven by an increase in economic wealth and disposal income, combined with people's propensity to travel to faraway places. This paper examines Scotland's prospects for international tourism, based upon a range of drivers such as GDP and inflation as determined by the OECD and exchange-rate forecasts by the Royal Bank of Scotland (Gardner, 2004). The forecasts are then adjusted to take account of changes to international exchange rates for spending and arrivals from the USA and Germany, Scotland's two largest overseas markets. Additionally, forecasts have been altered to take into account supply factors such as direct air links.

This paper is about Scotland's international markets rather than UK tourism i.e. tourists from the UK who holiday in Scotland. The value of the UK market to Scotland is forecast to be £4.3bn in 2005, rising to £4.8bn in 2008. As this figure includes inflation, the real value is expected to be £4.1bn, rising to £4.4bn in 2008. Scotland is predominately a tourist destination for UK residents. In 2002, UK consumers accounted for 90% of all trips and 80% of revenue. The prospects for the UK market are closely aligned to the performance of the UK economy, to transport links, climatic conditions, activities, image and the product offering (Munro & Yeoman 2005). The drivers for UK tourism are different from that of international tourism. For further details of the UK market and prospects, readers are referred to www.scotexchange.net, where domestic forecasts are available.

Methodology

Econometric models are useful for providing forecasts based on relatively stable and predictable long-run relationships between tourism demand and its drivers. The econometric model used to quantify the more predictable element of tourism demand for Scotland was estimated using structural time series modelling. This type of modelling has an established tradition of providing forecasts of tourism demand at both the sub-national and national levels (Clewley *et al*, 1990; Paptheodoros & Song 2003; Song & Witt, 2000). It takes account of the effects on tourism demand of the key economic drivers of demand, seasonal changes in demand, and intervention variables for one-off events such as major unanticipated changes in exchange rates, political changes or sporting events. The general form of the equation that was estimated for tourism demand in Scotland is given by:

$$y_t = \phi y_{t-1} + \beta_1 GDP_t + \beta_2 RER_t + \beta_3 RERCD_t + \gamma_t + \xi_t$$

Where y_t is the endogenous variable that may be either the log of the number of arrivals or the log of tourism spending depending on the purpose of the model, y_{t-1} represents the auto regressive process of the model; GDP_t is the log of real GDP in per capita terms; RER_t and $RERCD_t$ are the logs of the real effective exchange rate of the currency of the incoming tourist with respect to domestic currency (the pound in this case) and with respect to the currency of the competitive destination respectively; γ_t represents the fixed trigonometric seasonal component, such as that for quarterly data;

$$\gamma_t = \gamma_1 \cos \frac{\pi}{2} t + \gamma_1^* \sin \frac{\pi}{2} t + \gamma_2 \cos \pi t$$

ξ_t has mean zero and variance σ^2 .

The terms ϕ , β_1 , β_2 , β_3 , γ_1 , γ_1^* , γ_2 are parameters to be estimated by maximum likelihood estimation. The model enables forecasts to be estimated for the main international markets for Scotland. Both arrivals and expenditure are considered as each has somewhat different impacts on and implications for the destination, so that information about both is useful. The data is drawn from the Office of National Statistics International Passenger Survey. The forecasts are based on long runs of quarterly data and can be provided for periods ranging from the following quarter to periods of up to 30 years ahead, although the confidence limits relating to longer-run periods are obviously wider than those for the short run.

The software interface provides for easy selection of the markets and the time periods for which the forecasts are provided, as well as for changes in the economic drivers of tourism demand. Where data is unavailable or unreliable, forecasts have been adjusted using secondary sources such as VisitBritain and the Australian Forecasting Council. As tourism forecasting is not an exact science, the main purpose of these forecasts is to inform opinion and to help policy-makers make more informed decisions. They are an interpretation of how GDP, inflation and exchange rates all influence international tourism arrivals. There are also an infinite number of other variables that could influence these forecasts, including climate, destination image, direct flights, marketing and film tourism, etc. Some of these factors, such as climate and direct flights, can be quantified using computer general equilibrium modelling whereas others factors, such as destination image, marketing and film tourism, can't be. Readers who would like a fuller explanation of our approach to tourism forecasting are referred to Blake *et al* (2006)

International Tourism Prospects

Weighted Currencies

The continued growth in the strength of the Euro and the decline of the dollar present contrasting conditions for foreign travel in our major international markets. For American tourists foreign travel must appear an expensive luxury in 2005 and with the dollar expected to fall further as the US attempts to decrease its trading deficit, this is not a situation that is likely to change in the near future.

However, although sterling has appreciated against the dollar in recent times, because of the exceptionally strong Euro, the UK and Scotland may appear cheaper in comparison.

For the same reasons, although the UK has become a relatively cheap destination, Eurozone tourists may be inclined to bypass the UK in favour of the remarkably economical US. Early evidence from the US Department of Commerce indicates that this is already be taking place, with visits to the US from Western Europe up 17% during the first 8 months of 2004 (Dupont, 2004).

Uncertainties

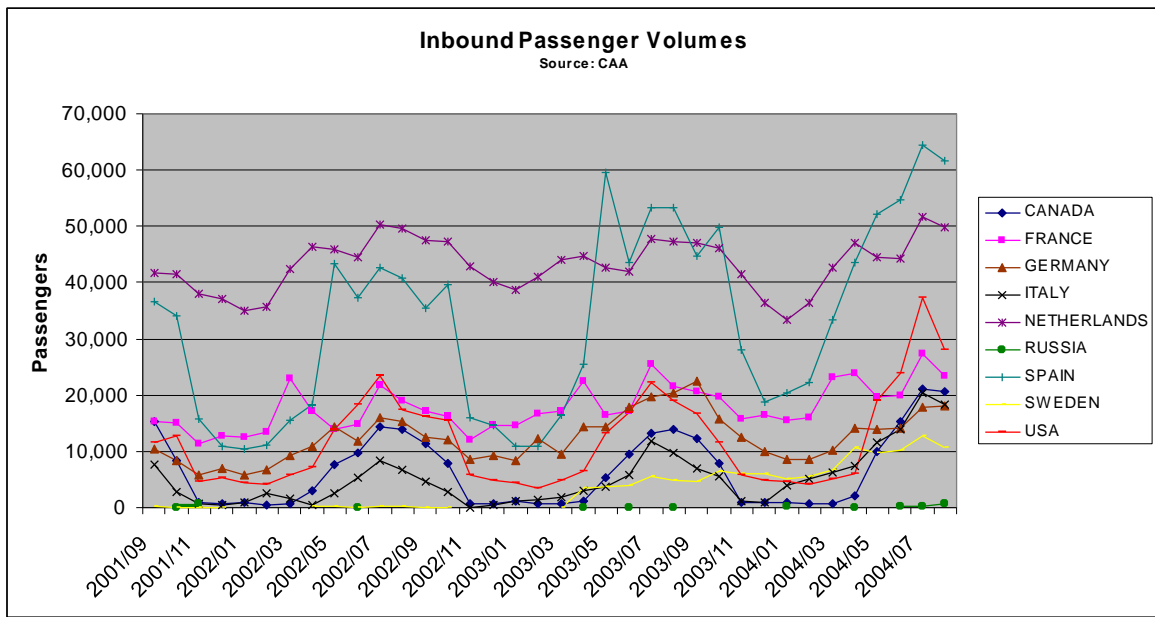
Terrorism and diseases have a major impact upon international tourism but these are difficult to predict because of their geographical location. There is a risk - according to the World Health Organisation - of a pandemic in the world, similar to the influenza outbreak in 1917. Such a scenario is difficult to model when economies could suffer from major structural changes as a result of such an event. Disasters such as the Indian Ocean Tsunami have taken our thinking beyond the norm to a broader understanding of the unthinkable and its consequences. The continued presence of a terrorism threat is real, with Metropolitan Police Commissioner Sir John Stevens (BBC, 2004) warning that a terror attack on London is inevitable and the arrest of the alleged 'fertiliser' bombers (Tyler, 2004) in South East England. Furthermore, the forthcoming G8 summit at Gleneagles in July 2005 will be the focus of anti-war protestors, which may have a disruptive effect upon international inbound tourism to Scotland (Dissent, 2004).

Transport

Information provided by the Civil Aviation Authority has been used to populate the charts above, but it should be noted that this data comprises only direct flights and will include returning Scottish tourists.¹ Of particular note is the establishment of the Swedish routes and the massive increase in arrivals from Italy, up 150% in the period July to August 2004 compared with the same period in 2002. Increases in arrivals from Spain, Germany, Canada, and France are also noticeable.

The total number of inbound arrivals to Scotland continues to grow as budget airlines introduce new routes and increase the frequency of flights on existing routes.

Figure 1 – Monthly Inbound Passenger Volumes to Scotland



* Spain = Mainland Spain only.

Figure 2 – Total Monthly Inbound Passengers to Scotland

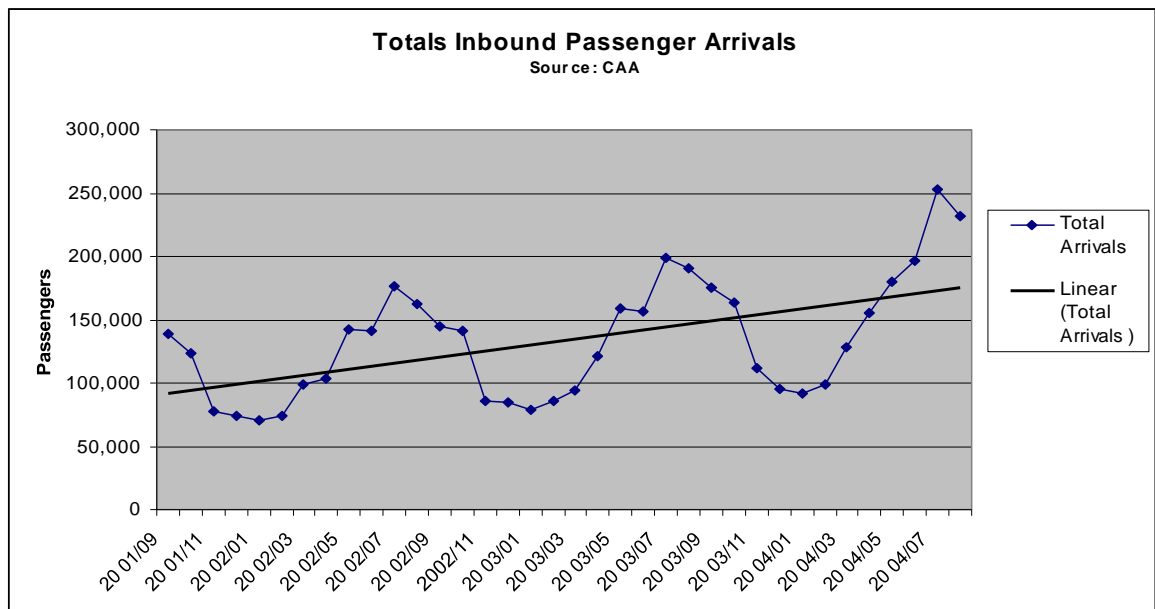


Table 1: International Tourism Forecasts

Country	Trips (000)							Nominal Spending (£M)							Real Spending (£M)						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
Australia ¹	98.8	106.9	115.4	124.5	129.1	133.4	141.1	47.4	49.0	54.0	58.8	62.4	65.8	71.0	47.4	47.7	52.6	55.8	58.8	60.7	64.2
Canada	117.1	87.7	133.7	143.4	147.0	150.6	154.4	49.4	42.2	68.1	77.9	80.2	83.9	87.7	49.4	41.1	66.3	74.0	75.7	77.5	79.3
France	124.4	87.1	124.2	138.9	143.4	147.6	152.0	40.2	33.2	40.9	47.0	48.8	51.4	54.0	40.2	32.3	39.8	44.6	46.1	47.4	48.8
Germany ²	136.2	175.2	177.2	223.7	221.8	219.2	216.8	54.8	104.6	74.3	91.6	87.7	85.3	82.9	54.8	101.9	72.3	86.8	82.8	78.7	75.0
Italy	56.1	43.3	73.1	74.9	76.2	77.5	78.9	24.1	15.5	33.9	39.3	40.2	41.8	43.4	24.1	15.1	32.9	37.2	37.9	38.5	39.2
Japan ¹	29.3	22.0	23.6	25.0	26.6	27.8	28.7	17.9	11.0	12.1	12.9	14.0	15.0	15.8	17.9	10.7	11.8	12.3	13.2	13.8	14.3
Netherlands	66.0	73.0	81.4	81.2	82.8	84.6	86.4	25.5	34.4	32.8	33.4	34.2	35.6	37.0	25.5	33.5	31.9	31.7	32.2	32.8	33.5
Russia ¹	16.8	13.1	14.3	14.8	15.4	16.0	16.7	10.5	6.3	7.1	7.4	8.0	8.4	8.9	10.5	6.1	6.9	7.0	7.5	7.7	8.0
Spain ³	43.6	62.6	96.4	104.0	112.2	121.1	130.7	22.5	49.1	59.6	71.1	79.1	89.3	100.8	22.5	47.8	58.0	67.4	74.5	82.4	91.1
Sweden ¹²	16.6	37.4	38.7	47.6	48.6	49.3	50.2	6.0	17.5	18.5	22.9	23.9	24.8	25.7	6.0	17.0	18.0	21.6	22.6	22.9	23.2
USA	386.5	413.8	456.8	485.8	503.4	522.5	542.0	236.2	227.7	254.8	299.7	316.9	341.5	367.0	236.2	221.8	247.8	284.6	298.7	315.1	331.8
Other International	489.4	443.2	661.5	706.5	721.5	734.1	744.5	371.8	246.8	274.9	274.0	276.3	279.7	281.3	371.8	240.3	267.3	260.2	260.4	258.1	254.3
Total International	1,580.8	1,565.3	1,996.3	2,170.3	2,228.0	2,283.8	2,342.4	906.3	837.3	923.4	1,025.2	1,058.0	1,105.4	1,154.2	906.3	815.3	905.6	982.9	1,010.4	1,035.6	1,062.7

¹ Forecast for Australia, Sweden, Japan and Russia were generated using a combination of historic data and information drawn from discussions with VisitBritain

² Forecasts for Germany and Sweden have been adjusted in line with Avia Solution forecasts to allow for supply-side factors and impending changes to the IPS methodology planned for 2005.

³ Forecast adjusted to reflect rolling average annual spend.

So how will Scotland fair in international tourism?

Australia

The Australian economy is set to grow for the thirteenth successive year (Shields, 2004) by an impressive 3.6% (OECD, 2004). The majority of indicators are positive, with gains taking place in productivity and employment, as well as improvements in the fiscal and external positions. Fiscal policy remains prudent and higher than expected revenues have led to predictions of a budget surplus of up to 0.5% of GDP. Although there has been a fairly sharp decline in house prices, falling between 4.8% and 5.7% in the third quarter, the Royal Bank of Australia has described the housing market as 'orderly' and that it does not pose a risk to the broader economic activity (Uren, 2004). The weakness of the Australian dollar, may, however, be cause for moderate concern; whereas inflation in the past has been kept in check by a strong currency, there are fears that increased costs as a result of higher import prices may start to push up the rate of inflation. The weakness of the Australian dollar will have a more direct and immediate impact on tourism prospects because of the increased cost of foreign travel. The introduction of the new Glasgow – Dubai air route will provide additional possibilities for Australian tourists; however the affect is expected to be modest.

Tourism revenues from Australia to Scotland, in nominal terms, are expected to be £54m in 2004 and £71m in 2008, an average annual increase of 7.9% or 5.5% in real terms. Trips are forecasted to be 115.4k in 2004 and 141.1k in 2008, an average annual increase of 5.6%.

Canada

GDP growth in Canada is forecast to be 3.0% in 2004 and rise to 3.5% in 2005 (OECD, 2004), generated by a combination of robust export growth and increased consumer spending (NIESR, 2004). The causes for the significant appreciation of the Canadian dollar against the US dollar are not yet fully understood, although it is thought that the weak US dollar and the fact that Canada is an oil-producing country are likely to be responsible (Szadurski, 2004). Inbound arrivals on direct flights from Canada in July 2004 were up 48% from July 2002 according to CAA passenger statistics (2004). The number of direct flights continues to grow with airlines such as Zoom planning further increases in 2005.

Tourism revenues to Scotland, in nominal terms, are expected to be £68.1m in 2004 and £87.7m in 2008, an average annual increase of 7.2% or 4.9% in real terms. Trips are forecasted to be 133.7m in 2004 and 154.4m in 2008, an average annual increase of 3.9%.

France

In early 2004, forecasters' expectations were that growth in the French economy would be slow and largely reliant on increased exports to the USA (Dempster, 2003). Although this has occurred to some extent with export volumes

expected to grow by 1% in 2004 (NIESR, 2004), it is the unexpected increase in domestic demand that has been responsible for the better than expected growth of 2.1% in 2004 (OECD, 2004). These increases in household consumption have been largely funded by increased borrowing and government tax cuts and there are signs that this is not sustainable, with GDP growth slowing in Q3 2004. In order to achieve the continued steady growth forecast by the OECD, France will need to continue its programme of reforms in pensions, health care and in the labour markets (the Economist, 2004a).

Passenger arrivals on inbound flights from France continued to grow in 2003 up 15% compared with 2002 (Dempster, 2003). With the introduction of new direct routes between Edinburgh-Nice, Glasgow-Nice in 2005 and multiple daily flights between Aberdeen and Paris, the expectation is that passenger volumes will continue to grow. Travel via Superfast Ferries from Belgium is expected to remain constant in 2004 compared with 2003.

Tourism revenues to Scotland, in nominal terms, are expected to be £40.9m in 2004 and £54m in 2008, an average annual increase of 8% or 5.7% in real terms. Trips are forecasted to be 124.2k in 2004 and 152k in 2008, an average annual increase of 5.6%.

Germany

The OECD forecast continued recovery for Germany, with GDP growth predicted to be 1.2% in 2004 and 1.4% and 2.3% in 2005 and 2006 respectively. However, in this export-led economy (Dempster, 2003), the strength of the Euro presents a particular threat to growth and this may already be being illustrated in the poor performance recorded in Q3 2004 (Sipilia, 2004). At home, business and consumer confidence remains low, unemployment remains above the 10% mark, and recent tax cuts have done little to stimulate household consumption. There are some signs to suggest that the domestic situation is at a turning point; and with planned reforms in pensions, health care and the labour market (similar to those of the French), there are hopes that this major European economy may be at last heading in the right direction (The Economist, 2004a). This journey of reform, although necessary, will not be an easy one and it is yet to be seen what the short-term consequences of such major changes will be to economic performance.

Although inbound passenger arrivals on direct flights from Germany were up 33% in 2003, statistics for 2004 show a flattening off, with the 2004 figures comparable to those seen in 2003 (CAA, 2004). Increased availability planned for 2005, including the introduction of a new daily Hamburg – Prestwick, route is expected to have a significant impact on tourism prospects. The number of German visitors using Superfast Ferries from Zeebrugge is expected to remain approximately the same for 2004 as it was in 2003.

Tourism revenues to Scotland, in nominal terms, are expected to be £74.3m in 2004 and £82.9m in 2008, an average annual increase of 2.9% or 0.9% in real terms. Trips are forecasted to be 177.2k in 2004 and 216.8k in 2008, an average annual increase of 5.6%

Italy

As anticipated, inflation has slowed in 2004 to 2.1% in September compared with 2.8% in 2003 as a whole (NIESR, 2004). Household consumption, however, remains weak, with concern over future prospects prompting higher savings by the consumer (Dempster, 2003). With investment spending predicted to remain restrained and the increase in exports likely to be subdued by the increasingly strong Euro, GDP growth is expected to remain slow at 1.3% in 2004, 1.7% in 2005 and 2.1% in 2006 (OECD, 2004).

There has been a massive growth in inbound arrivals on direct flights from Italy in 2004; arrivals for the period June to August 2004 were 52,800, up 95% on the same period in 2003 and more than 150% from 2002. It should be noted, however, that these statistics do not split out Italians from returning UK residents. Further direct flight availability is planned for 2005 with the introduction of flights from Pisa and an increase in the number of flights from Rome.

Tourism revenues to Scotland, in nominal terms, are expected to be £33.9m in 2004 and £43.4m in 2008, an average annual increase of 7% or 4.8% in real terms. Trips are forecasted to be 73.1k in 2004 and 78.9k in 2008, an average annual increase of 2%.

Japan

The high value of the yen against the dollar threatens Japan's slow recovery (Jopson, 2004); the Bank of Japan highlighted this in their latest report saying "Japan's economy continues to recover as a whole, although the increase in exports and production seems to be coming to a pause". Since this statement was made the situation has moved on, with the GDP growth reported for Q2 2004 recently being revised to show an actual decline of 0.1% (Duncan, 2004). Demand for Japanese products has fallen because of the weak dollar and an overall slowdown in global activity. On a more positive note, the Bank of Japan recently announced that it expects inflation rather than deflation in 2005, even if at a rate of only 0.1% (The Economist, 2004b). This would be the first time for several years that prices have risen, although it is unlikely that such a small rise would prompt the central bank to raise interest rates from their current zero rate. The introduction of the new Glasgow - Dubai service will increase supply possibilities but the effect is expected to be modest.

Tourism revenues to Scotland, in nominal terms, are expected to be £12.1m in 2004 and £15.8m in 2008, an average annual increase of 7.6% or 5.3% in real terms. Trips are forecasted to be 23.6k in 2004 and 28.7k in 2008, an average annual increase of 5.4%.

Netherlands

The Netherlands continues to recover from the recent severe recession, with GDP growth of 1.2% forecast for 2004 and 2005 (OECD, 2004). Domestic consumer demand, however, continues to be undermined by an unstable job market. The government persists with an unpopular scaling back of the generous Dutch welfare system in an attempt to improve competitiveness and productivity which in the short term could undermine domestic demand even further, but which in the medium term should see GDP growth rise to 2.4% in 2006.

There are already extensive air links between Scotland and the Netherlands and the minor cut-backs expected in 2005 are not expected to have a significant impact on tourism prospects. An increase of approximately 14% in the number of visitors using the Superfast Ferries is expected for 2004 compared with 2003.

Tourism revenues to Scotland, in nominal terms, are expected to be £32.8m in 2004 and £37m in 2008, an average annual increase of 3.2% or 1.3% in real terms. Trips are forecasted to be 81.4k in 2004 and 86.4k in 2008, an average annual increase of 1.5%.

Russia

Russia continues to meet and exceed self-set targets, with national income on track to achieve Putin's goal of doubling GDP in ten years (British Embassy Moscow, 2004). In order to achieve long-term growth, however, significant reforms will be required in the structure of the national monopolies that exist in the energy and financial sectors. Russia as an oil exporter is benefiting from the current high oil prices, but it yet to be seen how this money will be invested and what long-term benefits this will bring. The declining population in Russia is a major cause for concern; birth rates are low as a result of widespread infertility and death rates are extraordinarily high due largely to alcohol consumption (The Economist, 2004c). The working-age population will be hit in the near future.

Corruption remains a major risk for the Russian economy and there are some recent signs that capital flight may have resumed following a number of dubious developments (Shields, 2004).

On the supply side, direct flights between Scotland and Russia look set to continue in 2005 and new routes into London from cities such as the wealthy Ekaterinburg in the Ukraine are planned for next year.

Tourism revenues to Scotland, in nominal terms, are expected to be £7.1m in 2004 and £8.9m in 2008, an average annual increase of 6.3% or 4% in real terms. Trips are forecasted to be 14.3k in 2004 and 16.7k in 2008, an average annual increase of 4.2%.

Spain

Spain's economy continues to outperform the Eurozone, with GDP growth forecast to be 2.6% for 2004 (Dempster, 2003). House prices continue to rise even though the Bank of Spain estimated that they were overvalued by 8-20%. Although a crash in the housing market remains a risk, it is relatively unlikely because interest rates are low and there is a healthy labour market. Household consumption remains healthy and signs are that this will continue in the medium term, with continued growth forecast in employment. New air routes between Scotland and Spain operated by Flyglobespan and Ryanair offer increased opportunities for Spanish tourists.

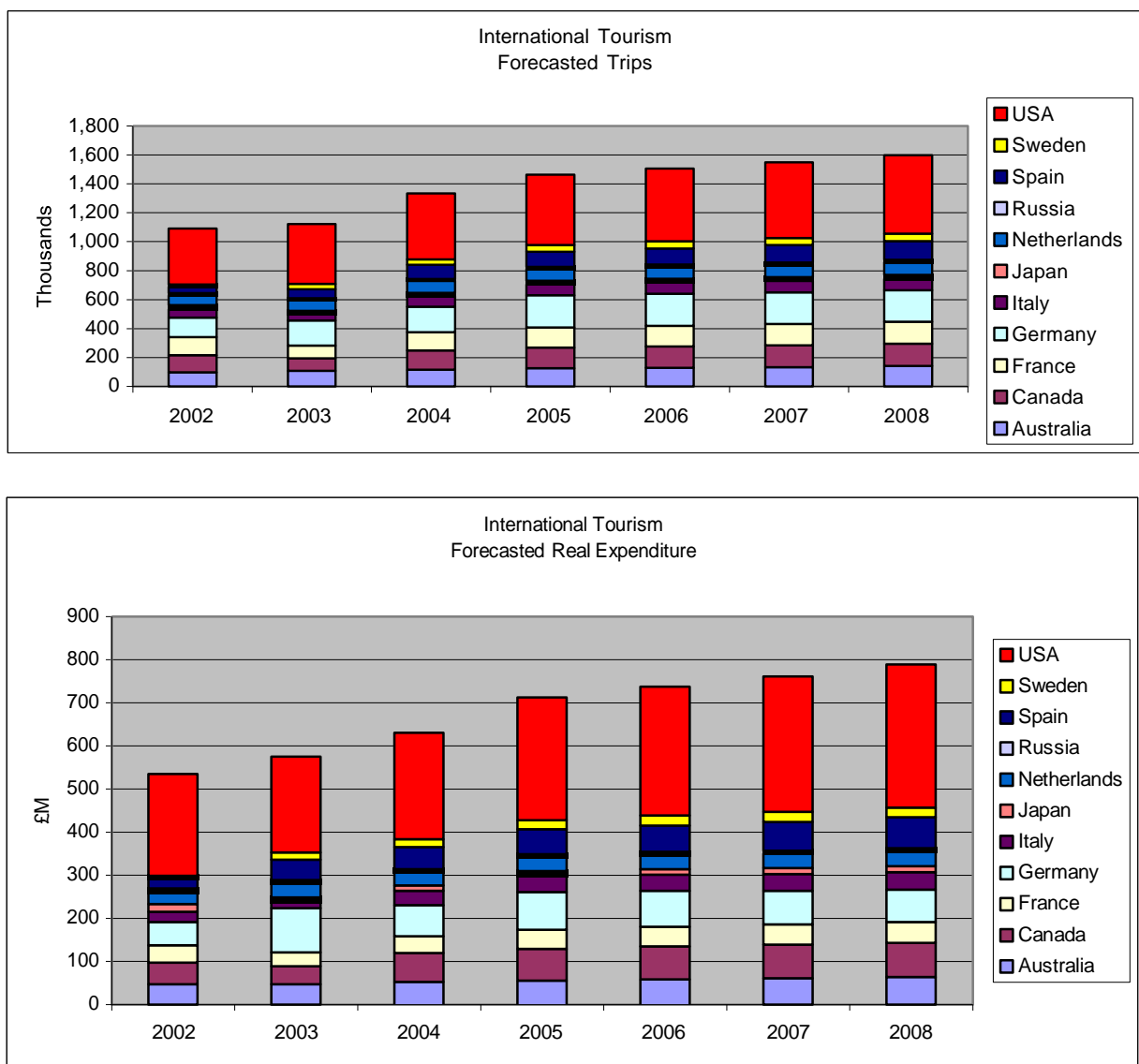
Tourism revenues to Scotland, in nominal terms, are expected to be £59.6m in 2004 and £100.8m in 2008, an average annual increase of 17.3% or 14.3% in real terms. Trips are forecasted to be 96.4k in 2004 and 130.7k in 2008, an average annual increase of 8.9%.

Sweden

Strong performance both in terms of exports and domestic demand should see GDP growth for 2004 of 3.3% well above the trend for the Eurozone average. Exports will slow down in line with the global economy; however, the momentum in consumption and business investment should be enough to sustain domestic demand growth and GDP growth (OEF, 2004a). The fact that the domestic economy is in such a healthy state no doubt had an influence on the 'no' vote in the recent referendum on joining the Euro. From a standing start in 2003, inbound arrivals on direct flights from Sweden grew significantly in 2004 as a result of Ryanair's successful Gothenburg and Stockholm routes.

Tourism revenues to Scotland, in nominal terms, are expected to be £18.5m in 2004 and £25.7m in 2008, an average annual increase of 9.7% or 7.2% in real terms. Trips are forecasted to be 38.7k in 2004 and 50.2k in 2008, an average annual increase of 7.4%.

Figure 3 - Tourism Forecast



USA

Strong GDP growth, led by largely by increased domestic demand, is being witnessed in the US (Gardner, 2004c). As consumer confidence grows on the back of encouraging employment prospects, the Federal Reserve is expected to continue to raise short-term interest rates. Top of the economic list for the newly re-appointed Bush will be the substantial fiscal deficit (Gardner, 2004d) which he plans to tackle by cutting public expenditure, which may have a negative impact on GDP growth. The current account trade deficit is also cause for concern and, although the exceptionally weak dollar (\$1.30 against the Euro, December 04) will lead to greater demand for US goods, it is thought that this will lead to only marginal improvement (OEF, 2004c). It is growth in the world economy that Bush must rely on for increased demand (NIESR, 2004). The effect of sustained high oil prices is being felt by businesses and consumers alike and remains a risk to continued growth. The major impact on tourism prospects will continue to be the weak dollar as foreign travel from a US perspective looks decidedly expensive. However, the fact that the Euro is particularly strong may make the UK appear cheaper by comparison. The availability of direct flights between Scotland and the US continues to grow, with the introduction of new services from New York and Philadelphia and an increase in the frequency of flights during the summer months is forecast for 2005.

Tourism revenues to Scotland, in nominal terms, are expected to be £254.8m in 2004 and £367m in 2008, an average annual increase of 11% or 8.5% in real terms. Trips are forecasted to be 456.8k in 2004 and 542k in 2008, an average annual increase of 4.7%.

Summary

The USA continues to be the largest single country of origin, making up 22.9% of all trips into Scotland and 24.9% of spend in 2004, growing to 23.1% of trips and 28.6% of spend in 2008. The average spend per trip in real terms will rise from £542 in 2004 to £612 in 2008. The USA will account for over 50% of the overall rise in expenditure by international tourists. In contrast, spend per trip from German tourists will fall from £408 in 2004 to £346 in 2008. Spain will grow in terms of significance, with an increase of 35.5% in trips and 57.1% in spend forecast from 2004 to 2008. A strong Swedish economy will mean that revenue from Sweden will grow by more than 30% from £18m in 2004 to £23.2m in 2008.

Total international tourism revenues to Scotland, in nominal terms, are expected to be £923.4m in 2004 and £1,154.2m in 2008. This represents an overall increase of 25% or 16.2% in real terms. Trips are forecast to be 1,996.3k in 2004 and 2,342.4k in 2008, an overall increase of 17.3% and an average annual increase of 4.3%. The average spend per trip in real terms will remain constant over this period at approximately £495 per trip.

Scenarios

So far we have looked at the most likely prospects for international tourism based on benchmark data. In this section we take a look at some possible economic scenarios and the consequences for Scottish tourism in the years 2005-2008 based upon changes to GDP inflation and exchange rates.

Figure 4 - Total Tourism Forecast

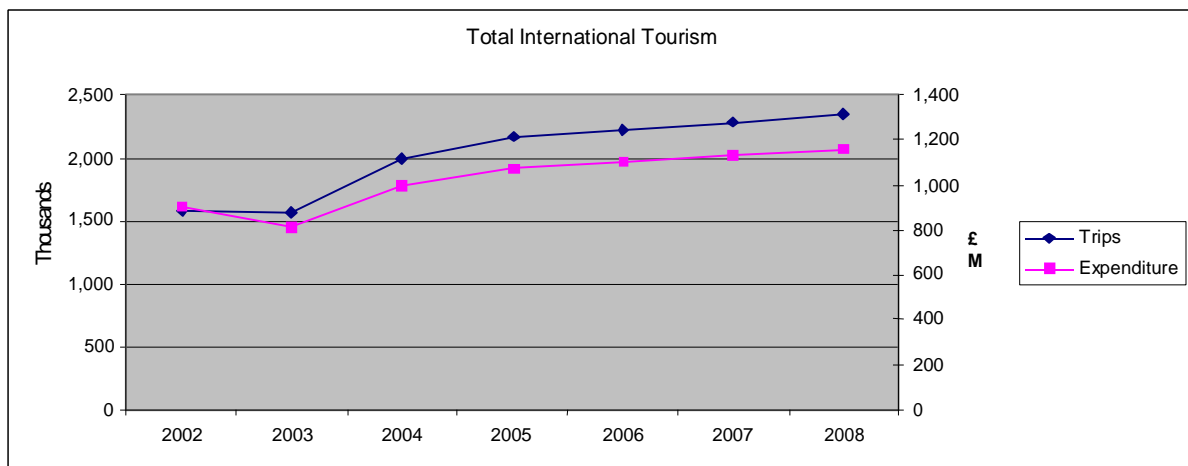


Table 2: US Scenario Input Data

Year	Benchmark			A Fistful of Dollars			For a Few Dollars More		
	ER	GDP %	CPI %	ER	GDP %	CPI %	ER	GDP %	CPI %
2005	1.85	3.3	2.40	2.00	4.00	2.50	2.30	1.70	2.55
2006	1.85	3.6	2.10	2.10	4.50	3.00	2.50	-1.20	3.50
2007	1.85	3.6	2.10	2.00	2.50	2.00	3.00	-0.50	3.50
2008	1.85	3.6	2.10	2.00	1.50	1.50	2.50	0.50	3.50

Table 3: US Scenario Forecasts

Year	Benchmark			A Fistful of Dollars			For a Few Dollars More		
	Trips (000)	Real Spending (£m)	Nominal Spending (£m)	Trips (000)	Real Spending (£m)	Nominal Spending (£m)	Trips (000)	Real Spending (£m)	Nominal Spending
2004	456.8	247.8	254.8	456.8	247.8	254.8	456.8	247.8	254.8
2005	485.8	284.6	299.7	479.0	265.2	279.3	449.5	219.3	230.9
2006	503.4	298.7	316.9	495.0	268.9	285.3	433.4	195.8	207.7
2007	522.5	315.1	341.5	536.4	334.0	362.0	391.1	138.8	150.4
2008	542.0	331.8	367.0	555.2	361.2	400.6	463.6	248.4	275.0

Table 4: Germany Scenario Input Data

Year	Benchmark			Germany Deflation			Eurozone Decline		
	ER	GDP %	CPI %	ER	GDP %	CPI %	ER	GDP %	CPI %
2005	1.43	2.14	0.59	1.44	-1.00	-0.50	1.55	0.10	0.10
2006	1.43	2.14	0.59	1.40	-0.50	-0.20	1.70	-1.50	0.10
2007	1.43	2.14	0.59	1.37	0.50	0.00	1.65	0.50	0.10
2008	1.43	2.14	0.59	1.39	1.00	0.50	1.65	1.00	0.10

Table 5: Germany Scenario Forecasts

Year	Benchmark			A Fistful of Dollars			For a Few Dollars More		
	Trips (000)	Real Spending (£m)	Nominal Spending (£m)	Trips (000)	Real Spending (£m)	Nominal Spending (£m)	Trips (000)	Real Spending (£m)	Nominal Spending
2004	177.2	72.3	74.3	177.2	72.3	74.3	177.2	72.3	74.3
2005	223.7	86.8	91.6	175.6	64.8	68.4	169.3	63.7	67.2
2006	221.8	82.8	87.7	169.8	58.7	62.2	148.2	53.1	56.3
2007	219.2	78.7	85.3	165.9	53.8	58.3	144.9	49.3	53.4
2008	216.8	75.0	82.9	158.5	48.3	53.4	140.9	45.4	50.2

US Scenarios

A Fistful of Dollars

The US has allowed the dollar to slide as far as \$2.10 against the pound in 2007. However the East Asian central banks have stayed faithful, hanging on to their stocks of dollars. It would appear that the dollar's unique role as the world's reserve currency has allowed it to ride out this period of exceptional weakness. The increase in demand for US products caused by the weak dollar has had the desired effect and the current account deficit has begun to decrease. However, after an initial period of economic expansion, inflation begins to rise, prompting the Fed to increase interest rates and consequently slow the economy.

From Table 3, we can see that the number of tourist trips to Scotland falls slightly below the benchmark forecast in 2005 and 2006, with a total of 974k trips undertaken compared to 989k forecasted. From 2007 to 2008, however, trips grow at a faster rate, the net effect being that over this period there are actually 11.9k more trips than forecasted using the benchmark data. Initially expenditure falls below the benchmark forecast in 2005 and 2006; however, it bounces back in 2007 and 2008 to end up at £361.2m, some £29.4m above the central benchmark forecast. The cumulative effect is for expenditure over the period to be only £1m lower than in than the central forecast.

For a Few Dollars More

In order to reduce America's massive current account deficit that reached \$670bn or approximately 6% of GDP in 2004, the value of the dollar was allowed continue to decline throughout 2005 into 2006 reaching an unprecedented low of \$3.00 against the pound and \$1.70 against the Euro. Although this has had the desired affect of stimulating demand for US products and reducing the deficit, the consequences have been calamitous. Major East Asia central banks, tired of watching their dollar investments depreciate, moves away from the dollar and direct foreign investment into the US all but dries up. The gap left by the lack of US demand for imports could not be filled, leading to a worldwide fall in production, wealth and eventually demand. The combined affects of these factors were to push the US and the world into a depression.

Figure 5a - US Scenario Forecasts -Trips

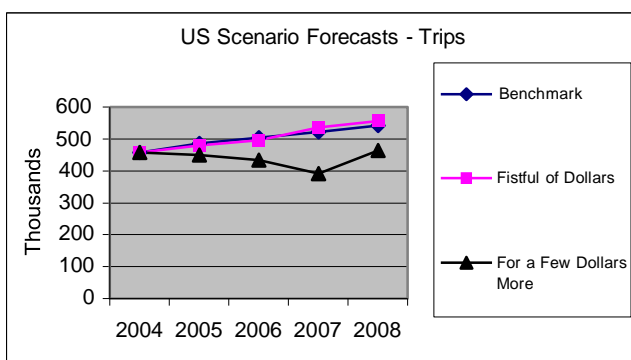
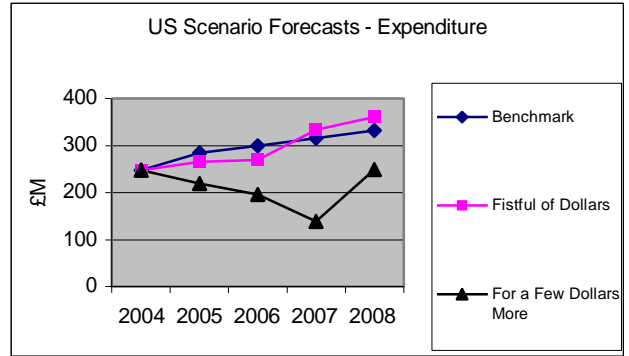


Figure 5b - US Scenario Forecasts - Expenditure



From Table 3, we can see that this is a disaster for Scottish tourism with both the volume and value of tourism from the US falling well below the benchmark forecast from 2005 through to 2008. Although there is some recovery in 2008, the cumulative effect is for there to be a massive shortfall in forecasted expenditure of £427m over the period.

Germany Scenarios

A State of Deflation

Germany, flooded by cheap imports from China and Eastern Europe, is experiencing deflation for the first time. Interest rates in the Eurozone have been slashed to 0% and eventually this does stimulate demand, but not before Germany experiences a period of deflation. Inflexible labour markets are unable to cope with this sudden turn of events and have further accentuated the problem, pulling Germany into a recession.

In Table 5, both the volume and value of German tourists are in steady decline from 2005 through to 2008. The number of trips undertaken in 2008 is some 26.6k fewer than in the benchmark forecasted and expenditure is £17m or 22.7% lower. The cumulative effect is a shortfall of 77.8k trips and £52.6m in expenditure.

Eurozone Decline

After several years of poor economic performance, Germany has fallen into recession. The exceptionally weak US dollar has prompted Asian central banks to switch away from the dollar in favour of the Euro, causing the Euro to surge in strength from an already strong position. The resultant fall in demand for expensive Eurozone goods has

which was in the middle of some difficult but necessary labour reforms was particularly hard hit, with GDP growth reaching -1.5% in 2006 and inflation virtually non-existent.

In Table 5, we see that both the volume and value of German tourists are in steady decline from 2005 through to 2008. The number of trips undertaken in 2008 is some 47.7k fewer than in the benchmark forecasted and

expenditure is £20.5m lower or 27.3%. The cumulative effect is a shortfall of 157.6k trips and £69.5m in expenditure.

Figure 6a Germany Scenario Forecasts – Trips

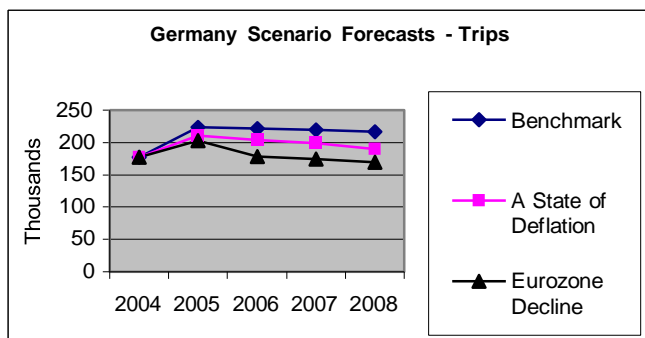
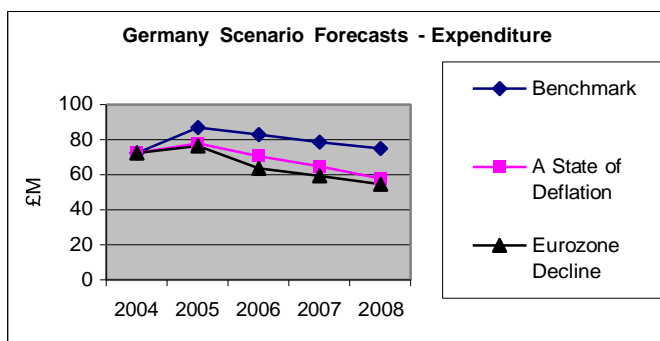


Figure 6b Germany Scenario Forecasts – Expenditure



Conclusions

The prospects for international tourism to 2008 are good both in terms of volume and value. The number of trips is forecast to increase by an average of 4.3% per year from 2004 through to 2008 and real expenditure by 4.2% over the same period. The results highlight the importance of the USA and Germany as key markets because of their relative size. Although the German economy is stagnant, the volume of tourists is critical to Scottish tourism. The connection between economic performance and tourism is highlighted by the increased arrivals from Spain and Sweden. VisitScotland is targeting these economies in particular through marketing, supported by the development of supply factors such as direct flights.

The relative economic performance of our target markets has a significant effect on tourism prospects. This is investigated within the scenario section where indicators such as exchange rates and GDP are changed and consequences explored. Although such extreme circumstances are unlikely, it is important to understand the significant influence which these factors have on the demand for the Scottish product.

The Indian Ocean Tsunami disaster highlights the problems of econometric forecasting in the terms of disruption and displacement. These forecasts presume no disruption, hence the title of the paper 'economic

prospects'. Disruption can be measured using other scenario analysis tools such as computer equilibrium modelling (Blake et al 2004), but this is beyond the scope of this paper.

The economic propensity is correct, but this shouldn't mean that we in Scottish tourism can be complacent. A targeted and proactive marketing strategy is still required because many other destinations are competing for these tourists. For example, Morocco (Anon, 2005) has a vision of 10 million international arrivals in 2010 compared to 2 million in 2002. This is supported by a massive infrastructure investment programme by both the private and public sector in Morocco. Professor Terry Stevens (2004) recently stated that Albania will be the number one European destination in 2015, because of its low cost base and its locality in the South East Europe.

The purpose of this paper is to highlight the potential for Scottish tourism from our international markets, but the outcome is dependent upon marketing activity and supply factors such as direct flights and a high-quality product.

References

- Anon (2005) Morocco 2010. Accessed at <http://www.morocco-2010.com/en/transport.asp> on 12th January 2005.
- BBC (2004) London terror attack 'inevitable'. Accessed http://news.bbc.co.uk/1/hi/uk_politics/3515312.stm
- Blake, A. Durbarry, R. Eugenio-Martin, J.L. Gooroochurn, N. Hay, B. Lennon, J. Sugiyarto, G. Sinclair. T & Yeoman, I (2006) Tourism in Scotland: The Moffat Model for Tourism Forecasting and Policy in Complex Situations. Tourism Management (forthcoming). Accessed www.nottingham.ac.uk/ttra
- British Embassy Moscow (2004) The Russian Economy: Into the Second Term. Accessed at www.britishembassy.gov.uk
- CAA (2004) Inbound Passenger Data prepared for VisitScotland.
- Clewer, A., Pack, A. & Sinclair M. T. (1990). Forecasting Models for Tourism Demand in City Dominated and Coastal Areas, Papers of the Regional Science Association, 69, 31-42.
- Cotis, J, P (2004) OECD Economic Outlook No.76. Accessed at www.oecd.org
- Dempster, N (2004) Eurozone Quarterly Economic Update – December. Accessed at [http://www.rbs.co.uk/Group Information/RBS and the Economy/](http://www.rbs.co.uk/Group%20Information/RBS%20and%20the%20Economy/)

- Dissent (2004) Newsletter. Accessed at <http://www.veggies.org.uk/newsletter1.pdf>
- Duncan, G (2004) The Times, Is the sun about to set on another Japanese dawn? Accessed at <http://business.timesonline.co.uk/article/0,,13133-1401744,00.html>
- Dupont, V (2004) Dollar sinks, EU travellers flood US. Accessed at <http://www.sundaytimes.co.za/zones/sundaytimesnew/basket10st/basket10st1101905270.aspx>
- The Economist (2004a) German and French economic reforms, A long, hard climb. Accessed at http://www.economist.com/displaystory.cfm?story_id=2142238
- The Economist (2004b) Death of Deflation? Accessed at http://www.economist.com/displaystory.cfm?story_id=3360442
- The Economist (2004c) Russian Demography – Death Wish. Accessed at http://www.economist.com/displaystory.cfm?story_id=3243005
- Gardner, R (2004a) Group Economics – Eurozone Quarterly Economic Update. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Gardner, R (2004b) Group Economics Interest and Exchange Rate Outlook – March 2004. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Gardner, R (2004c) Group Economics – International Weekly Review. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Gardner, R (2004d) Group Economics – US Quarterly Economic Update. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Jopson, B (2004) BoJ downgrades assessment of economic recovery. Accessed at <http://search.ft.com/search/article.html?id=041217006588>
- NIESR (2004) National Institute Economic Review No.190, Forecast for the World Economy – October 2004. pp1-31
- Munro, C & Yeoman, I (2005) Scotland's Economic Propensity for UK Tourism up to 2008: An Examination of Regional Markets. Accessed at http://www.scotexchange.net/economic_prospects_for_uk_tourism_to_scotland_to_2008.pdf
- O'Carroll, L (2004) RBS Group Economics, Global imbalances and the dollar. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- OECD (2004) Economic Outlook No.76. Accessed at www.oecd.org
- OEF (2004a) World Economic Prospects: Autumn 2004. Accessed at www.oef.com
- OEF (2004b) UK Economic Outlook, October 2004. Accessed at www.oef.com
- OEF (2004c) Assessment: The Falling Dollar – A Step Towards Global Rebalancing? Accessed at <http://www.oef.com/On-Line%20Services/AllClients/fallingdollar.pdf>
- Papatheodorou, A. & Song, H. (2003). International Tourism Forecasts: A Time Series Analysis of World and Regional Data, International Conference on Tourism Modelling and Competitiveness, Cyprus.
- Shields, C (2004) Group Economics – Emerging Markets Overview. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Shields, C (2004) Group Economics – Australia Quarterly Economic Update. Accessed at http://www.rbs.co.uk/Group_Information/RBS_and_the_Economy/
- Sipilia V, (2004) German recovery running out of steam? Accessed at <http://www.globalinsight.com/Perspective/PerspectiveDetail1247.htm>
- Song, H. & Witt, S. F. (2000). Tourism Demand Modelling and Forecasting: Modern Econometric Approaches, Pergamon: Oxford.
- Stevens, T (2004) Rival Destinations. Highlands Tourism Seminar. 11th December, Inverness
- Szadurski, W (2004) Global Insight – Strong Loonie Rattles the Canadian Outlook. Accessed at <http://www.globalinsight.com/Perspective/PerspectiveDetail1351.htm>
- Tyler, R (2004) British Police Arrest 8 Suspected of Plotting Terrorist Attack. New York Times, 31st March. Accessed at <http://www.nytimes.com/2004/03/31/international/europe/31BRIT.html>

Uren, D (2004) The Australian, Housing Falls. Accessed at http://www.theaustralian.news.com.au/common/story_page/0%2C5744%2C11564936%255E462%2C00.html

Endnotes

¹Although this information includes return passengers – it is only used as a guide not in the actual forecast. The information is used to support the forecast.

