



DEPARTMENT: AGRICULTURE
REPUBLIC OF SOUTH AFRICA

**Quarterly
Agricultural Economic
Review and Forecast
January to March 2004**

Volume 2 • Number 1

April 2004

CONTENTS

Preface.....	3
1. World economy	4
2. South Africa's economy	4
3. Macro economic variables and their impact on agriculture	4
3.1 Inflation	4
3.2 Growth	5
3.3 Exchange rates	6
3.4 Interest rates	6
4. Other factors impacting on and related to agriculture	6
4.1 Climatic conditions	6
4.2 Agricultural business confidence	7
4.3 WTO negotiations and subsidised exports.....	7
4.4 Agricultural competitiveness	7
4.5 Regional food security	7
4.6 SA grain, livestock and dairy sector model	7
4.7 Factors driving prices of agricultural commodity futures	8
4.8 Global Trade Analysis Project (GTAP)	9
4.9 Bio-diesel	9
5. Industry developments	10
5.1 Sunflowerseed	10
Main sources consulted.....	10

Compiled by Adèle Brouwer
In consultation with Ben van Wyk

Directorate Economic Analysis
3rd Floor – Harvest House
30 Hamilton Street, Arcadia 0002, South Africa

All correspondence can be addressed to:
The Senior Manager: Economic Analysis
Private Bag X416, Pretoria 0001, South Africa

Tel: +27 (12) 319 6331
Fax: +27 (12) 319 6076
e-mail: secsmea@nda.agric.za

Layout done by Directorate Agricultural Information Services
Private Bag X144, Pretoria 0001, South Africa

This publication is also available on the Internet at:
<http://www.nda.agric.za>

PREFACE

The core business of this directorate is to do analysis on national level in order to produce agricultural economic information and advice for sound decision-making on the South African (SA) agricultural sector. In an effort to support this important task a new division (Economic Research) is being created in the directorate that will concentrate on economic analysis relating to the performance of and external impact on the agricultural sector and its industries.

This publication developed from a need within the Department of Agriculture (DoA) to be regularly informed on recent developments and expected economic trends relating to the agricultural sector. To provide in the last mentioned need a quarterly report has been compiled for internal consumption over the last two years. Since the beginning of 2004 the report is also published for outside consumption as it can add value to a number of existing regular economic publications on the agricultural sector. The launch of this new series is therefore a historical landmark in the short history of the new Economic Research Division. It is our vision to establish it as indispensable reading for every serious student of the SA agricultural sector.

The format and content is still in the experimental phase. At this stage most of the content is based on sources outside the DoA. In time we hope to incorporate more departmental generated material. We would, therefore, appreciate comments on the content of this quarterly report series.

Mr B J van Wyk
Senior Manager: Economic Analysis
February 2004
Pretoria

1 WORLD ECONOMY

The world economy accelerated sharply during the second half of 2003. This improvement was particularly noticeable in the United States (US) and Asia and was reflected in a very strong improvement in global manufacturing conditions. This is expected to continue in 2004 in the form of a relatively synchronised global expansion. Japan and the Euro area are expected to grow at rates in excess of 2%. The improvement in world economic conditions, combined with the weak US\$, has resulted in a substantial improvement in commodity prices and this should continue well into 2004. The US\$, which has depreciated by more than 40% against the euro over the past two years, is expected to remain weak and to depreciate further. There remains a risk that the world economic recovery will falter, possibly because of problems in the US economy, and/or with global interest rates rising quicker and faster than expected. Any bullish view on the world economy at this point still has to be tempered by these possibilities. Real Gross Domestic Product (GDP) growth for a few important industrial and developing countries are summarised in Table 1.

2 SOUTH AFRICA'S ECONOMY

The performance of the SA economy in 2003 was characterised by a slowdown in the overall real GDP growth rate to around 2%, a sharp

deceleration in inflation, a consequent decline of 5.5% points in prime overdraft rates and the reversal of the current account of the balance of payments into a substantial deficit. The slowdown in growth came about despite fairly robust domestic demand conditions and may be ascribed to recessionary conditions in agriculture, parts of mining and manufacturing, with these sectors suffering the impact of the exceptionally strong rand exchange rate. Against this background, the outlook for 2004 and 2005 is fairly optimistic.

3 MACRO ECONOMIC VARIABLES AND THEIR IMPACT ON AGRICULTURE

3.1 Inflation

Recent trends: CPIX inflation (the consumer price index, which excludes mortgages) was pushed down rapidly in the second half of 2003 as a result of falling housing costs, lower food prices and the appreciating rand to estimated annual average as presented in Table 2.

Forecast: Although the South African Reserve Bank (SARB) only just met its 3–6% inflation rate target in 2003, its credibility remains good and inflation is expected to remain within the SARB's target range throughout 2004, even though the recent downward trend in inflation will be relatively short lived as the effects of the early season drought, the depreciation of the rand

TABLE 1: Real GDP growth

Industrial countries	2003	2004	2005	Developing countries	2003	2004	2005
Major seven	2.0	3.4	3.1	Emerging Asia ²	4.5	5.4	4.7
USA	3.1	4.4	3.6	China	8.3	8.0	7.2
Japan	2.2	2.8	2.6	India	8.0	6.0	6.0
Euroland ¹	0.5	2.5	2.5	Latin America	1.3	4.4	3.3
UK	2.1	3.5	2.9	Emerging Europe ³	4.8	4.9	4.5

¹ The 11 Euro countries

² Taiwan, Hong Kong SAR, Singapore, South Korea, Malaysia, Indonesia, Thailand and Philippines

³ Bulgaria, Czech Republic, Hungary, Poland, Slovak Republic, Russia, Turkey

Source: *Economic prospects, First quarter 2004*

TABLE 2: Annual CPIX inflation rates

	2003	2004	2005
BER	6.8	5.3	5.7
EIU	5.9	5.0	4.6
SARB	4	5	5

Bureau for Economic Research (BER); Economic Intelligence Unit (EIU); South African Reserve Bank (SARB)

and rising consumer spending will contribute to higher inflationary pressure in the second half of 2004. However, assuming a sound mix of fiscal and monetary policy combined with a reduced risk of further energy price shocks, public-sector wage moderation and lower private-sector unit costs (owing to productivity gains), the SARB is still expected to attain its target of 3–6 % in 2004–05. The main risk to the forecasts of the CPIX in Table 2 is a sharper depreciation of the rand followed by an intensification of the current drought (which did not materialise), both of which would lead to higher than forecast inflation.

Impact on agriculture: As higher inflationary pressure is expected for the second half of 2004, price increases for agricultural products might become a reality.

3.2 Growth

Recent trends: The economy is estimated to have expanded by just 1.9 % in 2003 according to BER and EIU, comparing unfavourable with the government's initial target of 3.3 %. The weak global economy, coupled with the strengthening of the rand during the year, affected the export sector's contribution to overall GDP. Growth in the agricultural, mining and manufacturing sectors was weak, but in the tourism sector growth was strong because it benefited from the government's vigorous marketing and the hosting of the Cricket World Cup.

Forecast: Real GDP growth is forecast to increase in 2004–05. Private consumption, in particular, should benefit from new tax-relief measures, structurally lower levels of inflation, a steady rise in employment opportunities and a

TABLE 3: Annual real GDP growth rates

	2003	2004	2005
BER	1.9	2.8	3.3
EIU	1.9	3.1	3.5
SSA	2.4	3.1	3.6
Consensus	2.0	2.9	

Bureau for Economic Research (BER); Economic Intelligence Unit (EIU); Statistics South Africa (SSA); Consensus between ABN Amro, ABSA bank, Deutsche Bank, Goldman Sachs, IMF, ING, JP Morgan, Lehman Brothers, Merrill Lynch, Nedcor Bank, Standard Bank, West LB Asset Management

more favourable interest-rate environment, which will support growth in real disposable incomes. Real government consumption, which has been held back by the authorities' tight budgetary control, will rise steadily during the forecast period. Spending on law and order, infrastructure, the HIV/AIDS programme, and other social services will accelerate. However, the main boost to growth will come from gross fixed investment as privatisation gathers pace and inflows of foreign direct investment (FDI) increase. Exports of goods and services will grow, underpinned by rising global demand, firmer commodity prices and the depreciation in the value of the rand, which will improve SA's international competitiveness. SA should also continue to benefit from free-trade agreements with the European Union (EU) and the US. The composition of key exports will be similar to that of recent years, led by platinum and gold, vehicles and vehicle parts, and manufactured goods. Imports of goods and services will remain high. Imports of consumer goods will rise as income per capita increases, and imports of capital and intermediate goods will also increase in line with rising FDI.

Impact on agriculture: The agricultural sector is expected to benefit from a continued growth in the world economy and the prospect of growth in the SA economy through an increased export demand and a domestic consumer-led-upswing. Table 3 summarises the annual GDP growth rates as estimated for 2003 and forecasted for 2004 and 2005.

TABLE 4: Annual average R/\$ exchange rates

	2003	2004	2005
BER	6.77	7.80	8.65
EIU	7.56	7.85	8.20
IMF	6.59	8.50	9.00
Consensus	7.20	7.90	

Bureau for Economic Research (BER); Economic Intelligence Unit (EIU); International Monetary Fund (IMF); Consensus between ABN Amro, ABSA bank, Deutsche Bank, Goldman Sachs, IMF, ING, JP Morgan, Lehman Brothers, Merrill Lynch, Nedcor Bank, Standard Bank, West LB Asset Management

3.3 Exchange rates

Recent trends: The SA rand strengthened by a massive 39.2 % against the US dollar in 2003, averaging an estimated $R_{7.56}US\$_1$, making it one of the world's strongest currencies according to EIU. The recovery was caused by a range of factors: the weakness of the dollar on international markets, the differential between SA interest rates and those in other emerging markets, improved sentiment towards emerging markets (helped by upgrades in SA's international credit ratings) and the country's sound economic fundamentals.

Forecast: It is assumed that the squeezing of the interest-rate differential in 2003 will lessen the financial incentive for foreign investors to buy into the rand, at the same time as the current account is expected to remain in deficit. The rand is, therefore, expected to trend down in 2004–05, although there could be periods of volatility owing to the low level of foreign-exchange reserves, inadequate inflows of FDI, an inflation differential relative to trading partners and vulnerability to unstable market sentiment. However, the closure of the net open forward position (NOFP) at the end of February should help to boost foreign reserves and somewhat reduce the volatility of the rand over the forecast period.

Impact on agriculture: The exchange rate of the Rand as a risk factor continues to play an important role in agriculture. With price as the driver of demand and supply, agricultural industries can expect an increased exposure to

international movements as the value of the Rand is expected to deteriorate to some extent during 2004. Table 4 summarises the annual average R/\$ exchange rates as estimated for 2003 and forecasted for 2004 and 2005.

3.4 Interest rates

Recent trends: In line with falling inflation, interest rates were cut sharply in 2003, with the repurchase (repo) rate reduced by a total of 550 basis points to end the year at 8 %—the lowest level since the rate was introduced in March 1998—which meant that the prime rate ended the year at 11.5 %. As expected, the SARB left its key repo rate unchanged at its first meeting in 2004, which was held on February 26th–27th. This has raised the debate about whether SA is now at the bottom of its current interest rate cycle.

Forecast: Although the December inflation figures were encouraging, leading indicators at that stage suggest that dry weather conditions in key crop-growing areas, combined with high fuel prices, are likely to increase inflationary pressure in the coming months. In general, the consensus view is that rates will remain constant for some time, but will move up towards the end of 2004. The expected increase in US interest rates by mid- to late 2004, coupled with stronger domestic demand, will mean that the repo rate cannot fall too far and will begin to edge up in the first quarter of 2005.

Impact on agriculture: Agriculture will continue to benefit from low interest rates, as rate payments are one of its biggest cost-items in the sector. Although the combination of low interest rates and cheaper imports makes it the right time to invest in machinery, caution should be taken as interest rates are expected to increase towards the end of the year.

4 OTHER FACTORS IMPACTING ON AND RELATED TO AGRICULTURE

4.1 Climatic conditions

During the first half of the 2003/04 summer rainfall season, the whole country (except Gauteng), experienced dry conditions. During the quarter under review good rains were received

throughout the country and as a result veld conditions and the level of dams have improved. Crops planted mid December to mid January are in good condition.

For the next quarter the SA weather service predicts a high probability of below normal rainfall conditions over the southwestern coast and the adjacent interior with a high probability of near normal rainfall conditions over the remainder of the country.

A 40 % probability of normal temperatures is expected over the entire country with a 35 % probability of above normal temperatures over the northeastern part and 35 % probability of below normal temperatures over the remainder of the country.

4.2 Agricultural business confidence

The Agricultural Business Chamber (ABC) compiles an index measuring the confidence of agricultural businesses. For the quarter under review, the index declined by 13.25 % compared to the same period last year. As was the case in the previous quarter, this decline (being the fourth consecutive one) was driven largely by the persistent drought in large parts of the country. The unfavourable conditions bring pressure on turnover, net operating income and cash flow of agribusiness, resulting in an escalation of bad debt. Negativity in business confidence also continued to be driven by the stronger rand, pushing export volume and product prices down.

4.3 WTO negotiations and subsidised exports

During the quarter under review Robert Zoellick, trade negotiator for the US, made the US's intent known to rethink their position towards agricultural subsidies. By doing this the US initiated further negotiations for free global trade, which they hope to discuss on the highest level by the end of the year. Apparently, they are also willing to break their agreement with the EU with regards to agricultural subsidies in an attempt to resolve the dispute with developing countries. This change in direction is believed to be as a result of resistance by the G20-countries and the thread that nothing will come from

their bilateral agreement with Australia in the absence of agricultural concessions.

4.4 Agricultural competitiveness

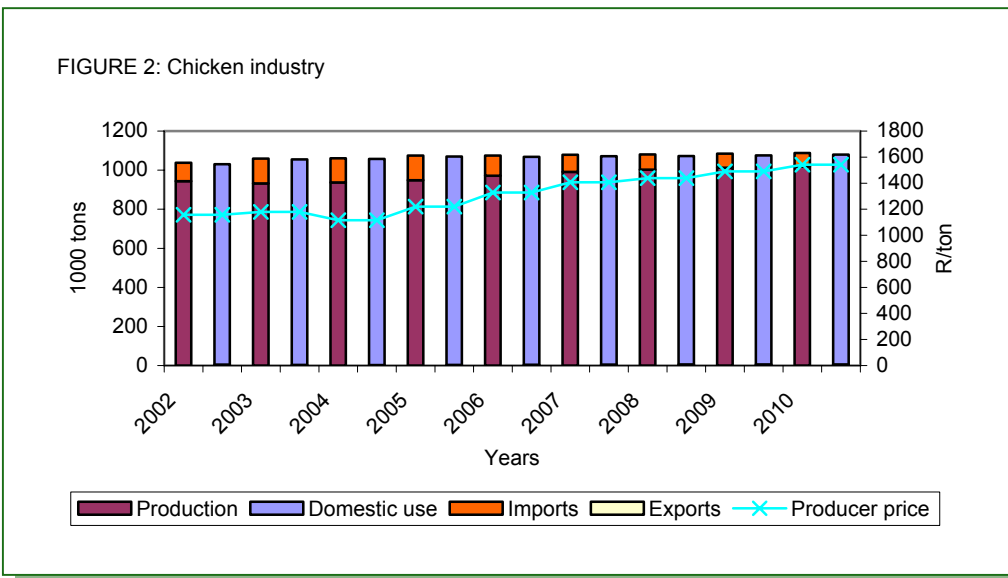
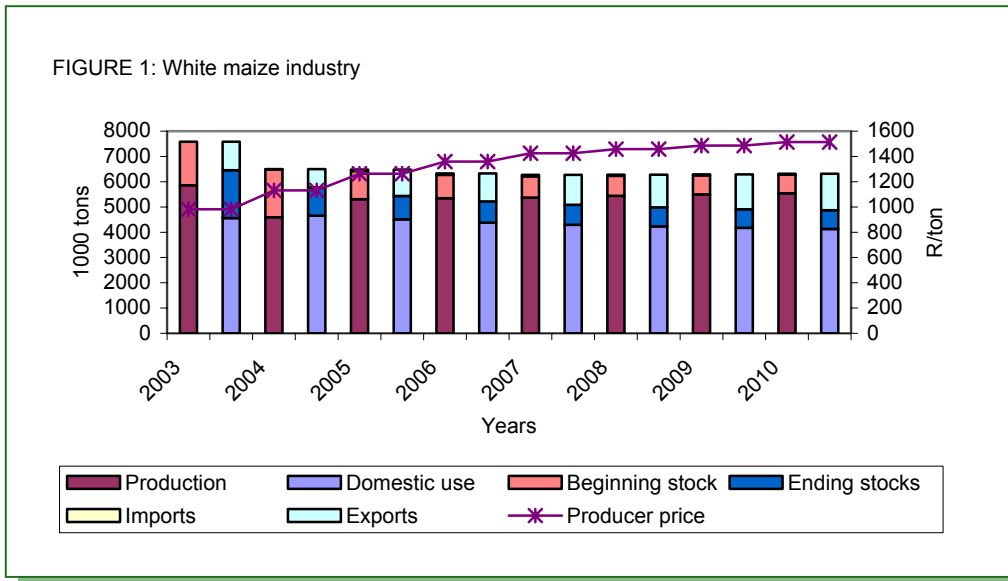
The ABC, also, compiles an index measuring the competitiveness of the agricultural sector, in other words, the sector's ability to sustain trade, globally, at competitive prices. According to the latest index compiled SA's agricultural competitiveness reached its lowest turning point (-0.15) in 1992 from where it improved with 0.63 index points towards 2002 (0.48). This upward trend can be attributed to improved business sense by SA agribusiness, deregulation of the agricultural sector that eliminated businesses that were not competitive, improved labour productivity and the supply of quality products.

4.5 Regional food security

Southern Africa expects a below normal crop harvest this season as a result of the poor crop growing conditions experienced in the first half of the rainy season. The start of the season was delayed, with erratic and spotty rainfall characterised by long dry spells that resulted in crop failures in many parts of the region. Preliminary indications are that the regional maize shortfall in 2004/05 could range between 851 000 and 2.4 million MT. The worst affected countries include Lesotho, Malawi, Mozambique, South Africa, Swaziland and Zimbabwe. Acute household food insecurity is likely to rise even further in the affected countries as many of them are going through a third consecutive year of food shortages.

4.6 SA grain, livestock and dairy sector model

During the quarter under review the consortium members of the above-mentioned model, as developed by the University of Pretoria, invited the Directorate Economic Analysis to a presentation of the first prototype model. Developed over the past three years this model is the first to give quantitative analysis and projections of how different policy options as well as a range of macroeconomic variables will affect the supply and demand of agricultural products in SA.



The model is a recursive, dynamic partial equilibrium model that uses econometric techniques to estimate a range of behavioural equations, which are then linked up in a system of equations. The model is designed to assist in addressing some of the most pressing information needs facing agribusinesses, farmers and policy makers in SA. The model is able to project what the possible effect will be on agriculture if there is a change in one or more of variables such as world prices of agricultural commodities, the exchange rate, weather, population size, GDP growth, input prices, interest rates and international and domestic policies. The model is based on the methodology of models used in the US and the EU, which were developed and maintained by the

Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri. The model has its foundations in econometric and economic theory, takes into account the biological component of agriculture, and incorporates the expert judgment of industry specialists.

By way of graphical presentations, Figures 1 and 2 are base line projections of two of the industries covered by the model.

4.7 Factors driving prices of agricultural commodity futures

Following the sharp increase in agricultural commodity prices during 2002 there has been a

general concern that speculators are the main cause of price volatility and increases on the agricultural commodity market of the Johannesburg Security Exchange (JSE) (previously known as SAFEX). In order to determine whether this is true, the University of Pretoria constructed a specific model, covering the period May 2000 to December 2003, to test whether the basic fundamentals are adequately influencing trends in the SAFEX white maize spot price. The model explains 89 % of the variation in monthly average SAFEX white maize spot price and found that the exchange rate and stock levels explained the long run trends, while monthly rainfall in the grain producing regions, the change in exchange rate from one month to the next, the change in Chicago board of trade yellow maize number 2 price (lagged 1 month), and the change in diesel price from month to month explained the short run trends. It can therefore be concluded that speculators do not have a significant effect on the monthly average spot price for white maize.

4.8 Global Trade Analysis Project (GTAP)

The directorates International Trade and Economic Analysis seconded five officials for training in the use of the GTAP model and to simulate the economic effects of different market access scenarios in the agricultural sector. This initiative was driven by the Investment and Trade Policy Centre (ITPC) at the University of Pretoria, funded by AusAID and presented by the Centre of Policy Studies (CoPS) at Monash University. The simulations are based on the 1997 model, aggregated over 19 sectors and 12 regions. The outcomes are as follows:

Uniform tariffs between SADC and other regions: This is a trade position only under consideration within the Southern African Development Community (SADC). For the purpose of this analysis, the assumption is made that Southern African Customs Union (SACU) will be the region whose tariffs will be adopted as the common external tariff (CET). Accordingly, SADC tariffs for the most important trading industries decreased. This caused an increase in imports into SADC and the local production of these industries to collapse. Despite this the welfare effect on SADC proved to be positive and on SACU to be negative.

FTA within Africa: With an Free Trade Agreement (FTA) within Africa, the overall welfare effect is positive, although on industry level there are winners and losers in all countries. Trade flows increased in both directions among all regions indicating definite scope for increased intra-Africa trade.

FTA between SACU and India: With the removal of import tariffs on bilateral trade between SACU and India, GDP and welfare increased for SACU, but decreased for India and the rest of the world. The volume of merchandise traded increased for both SACU and India, but decreased for the rest of the world. Although trade is not created, it is at least diverted towards SACU.

Technical progress: It was found that no realistic increase in primary factor productivity, capital stock or investment responsiveness is sufficient to create a 10 % increase in Africa's share of world exports. The impact of technology improvement on Africa's share of world exports seems to be driven largely by the rate of responsiveness of investment to the rate of return of capital. A decrease in the responsiveness of investment to the rate of return of capital for a specified change in technology improvement can reverse the results with regard to Africa's share of world exports, by causing an increase in the share. Other policy options such as trade liberalisation or an increase in savings are expected to be more effective in the short run.

4.9 Bio-diesel

During the quarter under review bio-diesel has, again, come under the loop as Sasol made its intent known to blend diesel with bio-diesel in order to supplement the supply of diesel and to soften the pollution impact of fossil fuel.

Some 20 years ago sunflower was regarded as the most suitable crop for bio-diesel production, as it yields the highest oil content. The problem with sunflower and canola is that acceptable crop rotation practices require that it can only be grown on the same land every fourth year. This problem is not experienced with soybeans, which is suitable for mono cropping and potentially, more than compensate, for much lower oil content.

The question arises how the agricultural sector will respond to the increased demand in soybean production. Currently, SA is a net importer of plant oil, as local production of all plant oil crops (sunflower, canola, soybeans, groundnuts and cotton) cannot meet the demand for human consumption. SA, also, imports large quantities of soybean oilcake, as it is the only oilcake that is suitable for use in the diets of non-ruminants, such as the poultry industry and, again, local production cannot meet the demand. It is a reality, therefore, that the local market for soybean production has always been there and yet farmers have failed to respond. Firstly, it suggests that the economy for producing soybeans relative to grain crops is unfavourable, because of its relative price and, secondly, it is known that technical production difficulties also constrains substantive plantings, especially in the highveld region. Accordingly, it is expected that Sasol will have to import either plant oil or soybeans. In the case of soybean imports, some livestock industries may benefit in the increased supply of the byproduct, oilcake.

The DoA is in the process of finalising a policy position on Bio-diesel from an agricultural and food security point of view.

5 INDUSTRY DEVELOPMENTS

5.1 Sunflowerseed

In January Savannah commodities and Willowton Oil & Cake Mills were granted an import

permit for 50 000 tons of sunflowerseed. These imports were supposed to bring relief to the countries shortages and to secure seed mills with seed until March, when the next season's harvest would become available. Imports were from Ukraine, who experienced a record harvest of high quality for the 2003-season. Due to the value of the Rand it was possible to import at discount prices compared to domestic prices. Domestic prices are expected to stabilise towards April as producers have responded to the high domestic price for sunflower and substituted maize for sunflower. Given favourable weather conditions, bigger harvests are expected for the 2004-season.

MAIN SOURCES CONSULTED

Beeld. Articles related to agricultural economics for January to March 2004.

Bureau for Economic Research (BER). Economic prospects. Vol 1, No 1. First Quarter 2004.

Business Monitor International (BMI). Africa Monitor, Southern Africa. Vol 9, No 3. March 2004.

Directorate Agricultural Risk Management. Information on request.

Economic Intelligence Unit (EIU). Country Forecast, South Africa. December, 2003.

Famine Early Warning System Network. Southern Africa Food Security Brief. March 2004.