

# LONG-TERM FORECAST OF THE SOUTH AFRICAN ECONOMY

By making use of SAFRIM (South African  
Inter-Industry Macro-Economic Model)

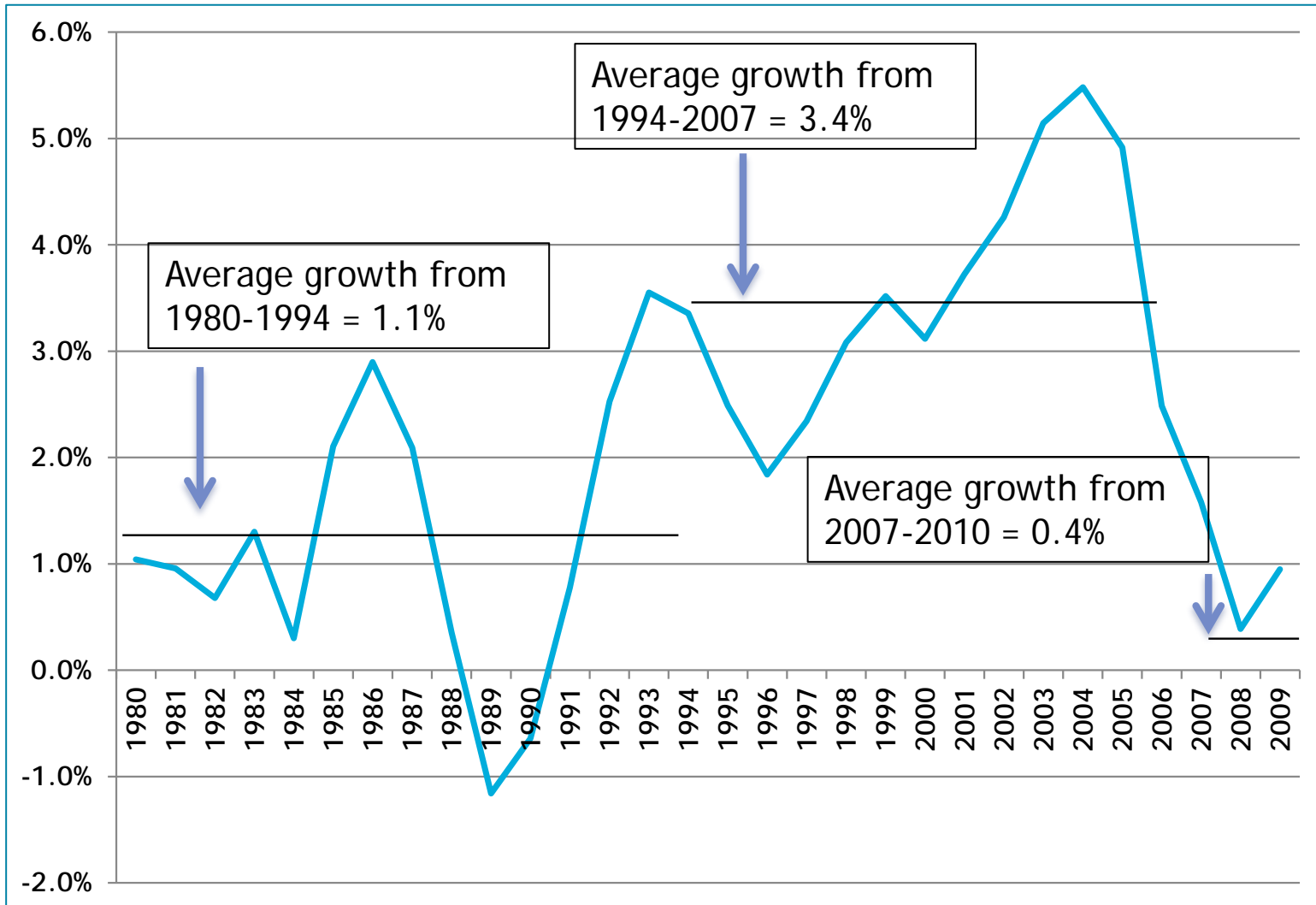
# SOUTH AFRICA FROM A HISTORIC POINT OF VIEW

- ◉ 1960: The economy experienced high growth rates
  - mining
  - raw materials
  - economy was tightly controlled.
- ◉ 1970: factors such as the world oil crises and changing gold prices slowed down the economy.
- ◉ 1971-1993: increased public spending, economic sanctions, and the effects of political instability stifled the economy. This period was characterised by
  - poor growth performance,
  - low levels of investment,
  - rising unemployment, political instability,
  - currency instability,
  - widening deficits,
  - falling living standards
  - growing inequalities.

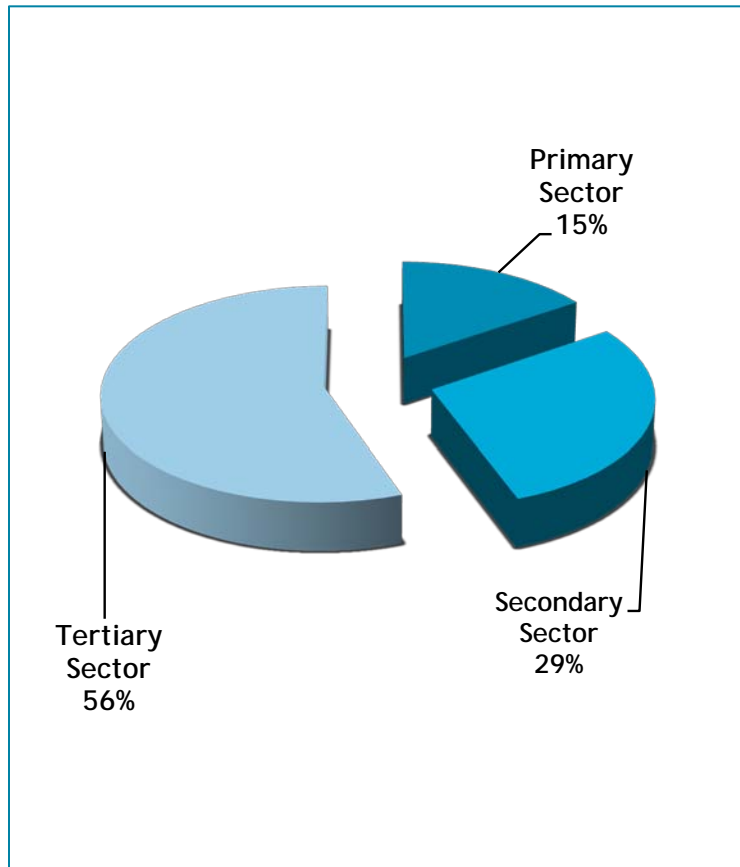
# SOUTH AFRICA FROM A HISTORIC POINT OF VIEW

- ◎ 1994: the government has been firm about getting the macro-economic balance right, in order to
  - attract investors,
  - reduce the budget deficit and
  - fight inflation through high interest rates.
- ◎ The government set economic objectives to achieve economic growth to create employment, and in that way lessen inequality and poverty.

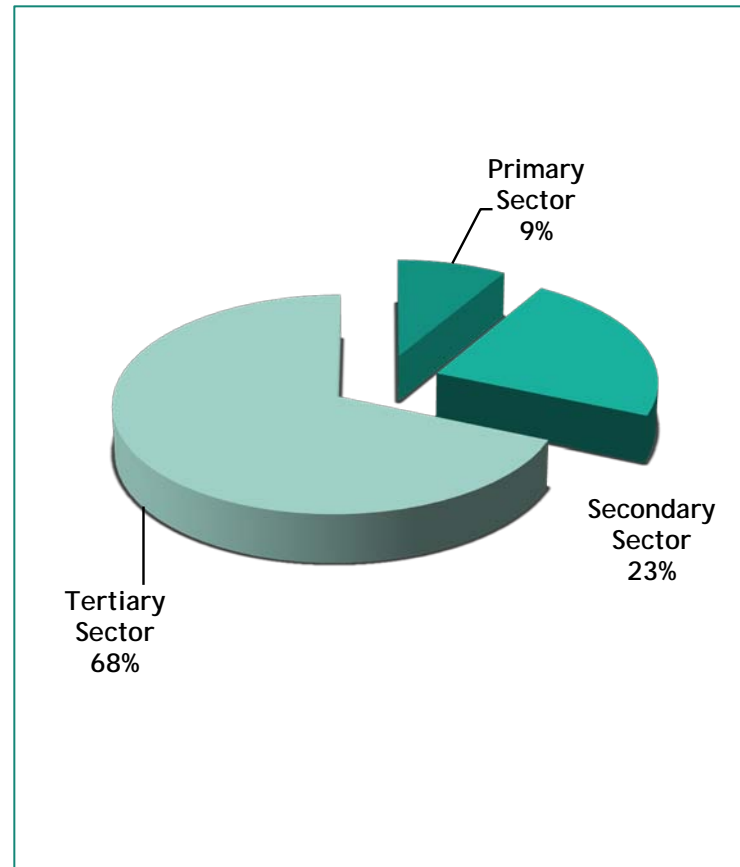
# HISTORICAL RSA GROWTH PERFORMANCE



# HISTORICAL SECTORAL COMPOSITION



1980



2010

# OTHER KEY ECONOMIC ISSUES

## ◉ Population Growth

- 44.8 million (2001 National Census) to 49.9 million (StatsSA, 2010), i.e. 1.1% per annum.

## ◉ Government Expenditure

- There is still a large backlog in the provision of socio-economic infrastructure and services in South Africa.
- Government spending has increased in the recent past in an effort to address the situation.

## ◉ Global Economic Trends

- Due to the South African economy's reliance on mineral exports, the country's economic growth is very much linked to what happens to its major trading partners.

## ◉ International Trade - South Africa, the Gateway of Africa

- Since the 1994 political dispensation, South Africa has become a major role player in the economic development of Sub-Saharan Africa as a service and manufacturing hub.

# BROAD OVERVIEW OF MODELLING SYSTEM

- Macro-Economic, dynamic and multi-sectoral.
- Projections
  - Aggregated GDP,
  - GDP components,
  - Demand categories that determine GDP.
- Multi-sectoral and includes input-output table and accounting which shows intermediate consumption.
- Behavioural equations for final demand.





# DEMAND AND SUPPLY COMPONENTS

- ◉ Final Consumption Expenditure by Households
- ◉ Final Consumption Expenditure by General Government
- ◉ Gross Fixed Capital Formation
- ◉ Change in Inventories
- ◉ Exports
- ◉ Imports
- ◉ Intermediate Demand
- ◉ Compensation of Employees
- ◉ Gross Operating Surplus
- ◉ Net Indirect Taxes
- ◉ Price Income Block
- ◉ Accountant

Production Block

Monetary Variables

# DATA AND DATA SOURCES

- ◉ Updated to 2010
- ◉ National accounts - South African Reserve Bank (SARB)
- ◉ Input-output tables, value added components, final demand components, investment, employment - Quantec
- ◉ Prices, trade data, capital - Conningarth Economists
- ◉ Historically from 1970 - 2030

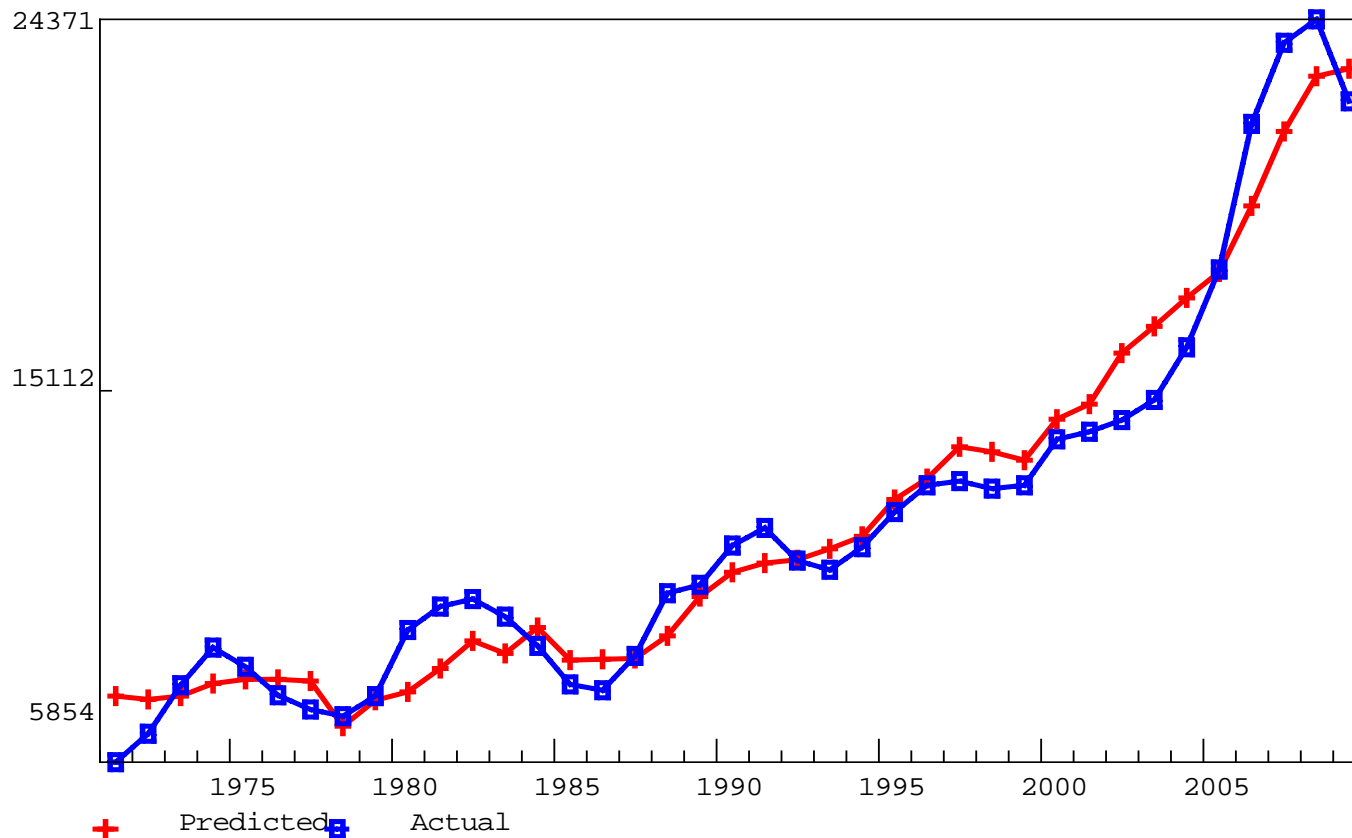
# FINAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS

- ◉ Mainly determined by the average propensity to save.

$$pcepc_{22} = f(\text{timet, private disposable income per capita, prime overdraft rate, relative prices}_{22})$$

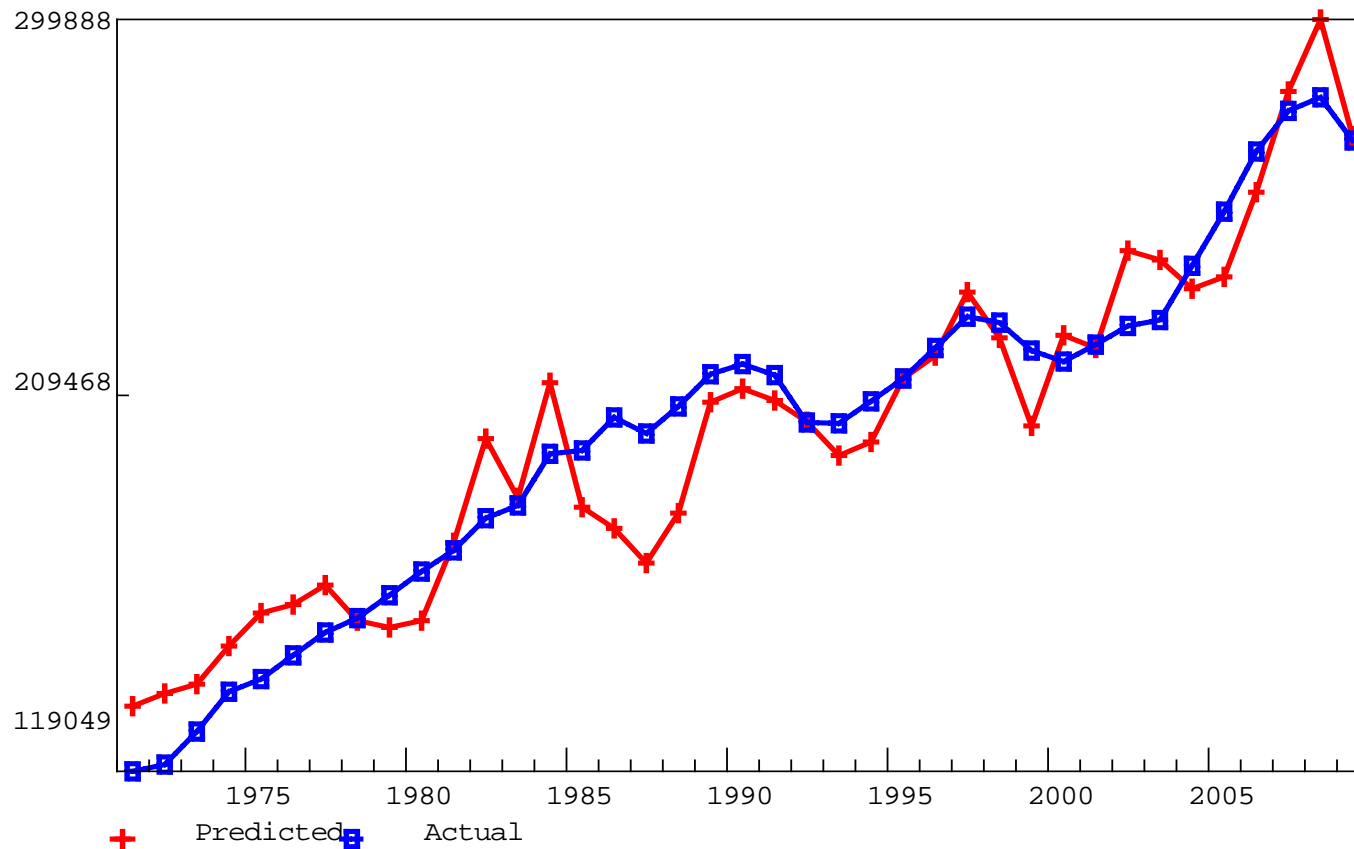
# FINAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS (CONTINUE)

## 1 Furniture, Household Appliances etc Consumption of Durables (Constant Prices)



# FINAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS (CONTINUE)

## 11 Food, Beverages and Tobacco Consumption of Non-Durables (Constant Prices)



# IMPORTS AND EXPORTS

## Estimating International Competitiveness

Exports

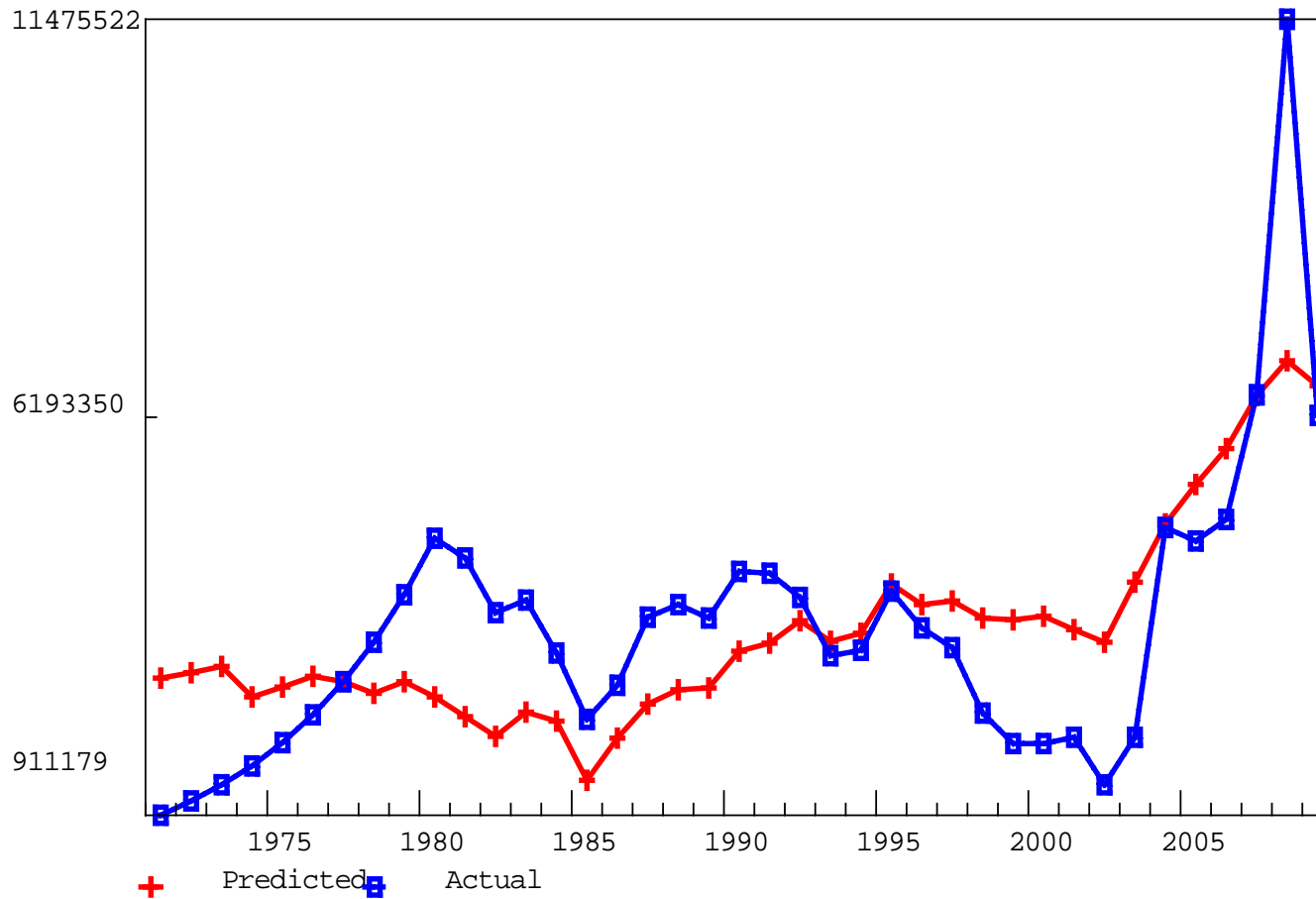
- *Impact on Exports =  $f(\text{World production, Relative prices})$*
- *World Production  $\Xi$  World GDP expressed in US\$*
- *Relative prices =  $f(\text{South African Inflation (PPI), US inflation rate})$*

Imports

- *Impact on Imports =  $f(\text{RSA production, Relative prices, International trade sanctions})$*
- *RSA Production  $\Xi$  RSA GDP*
- *Relative prices =  $f(\text{South African Inflation (PPI), US inflation rate})$*

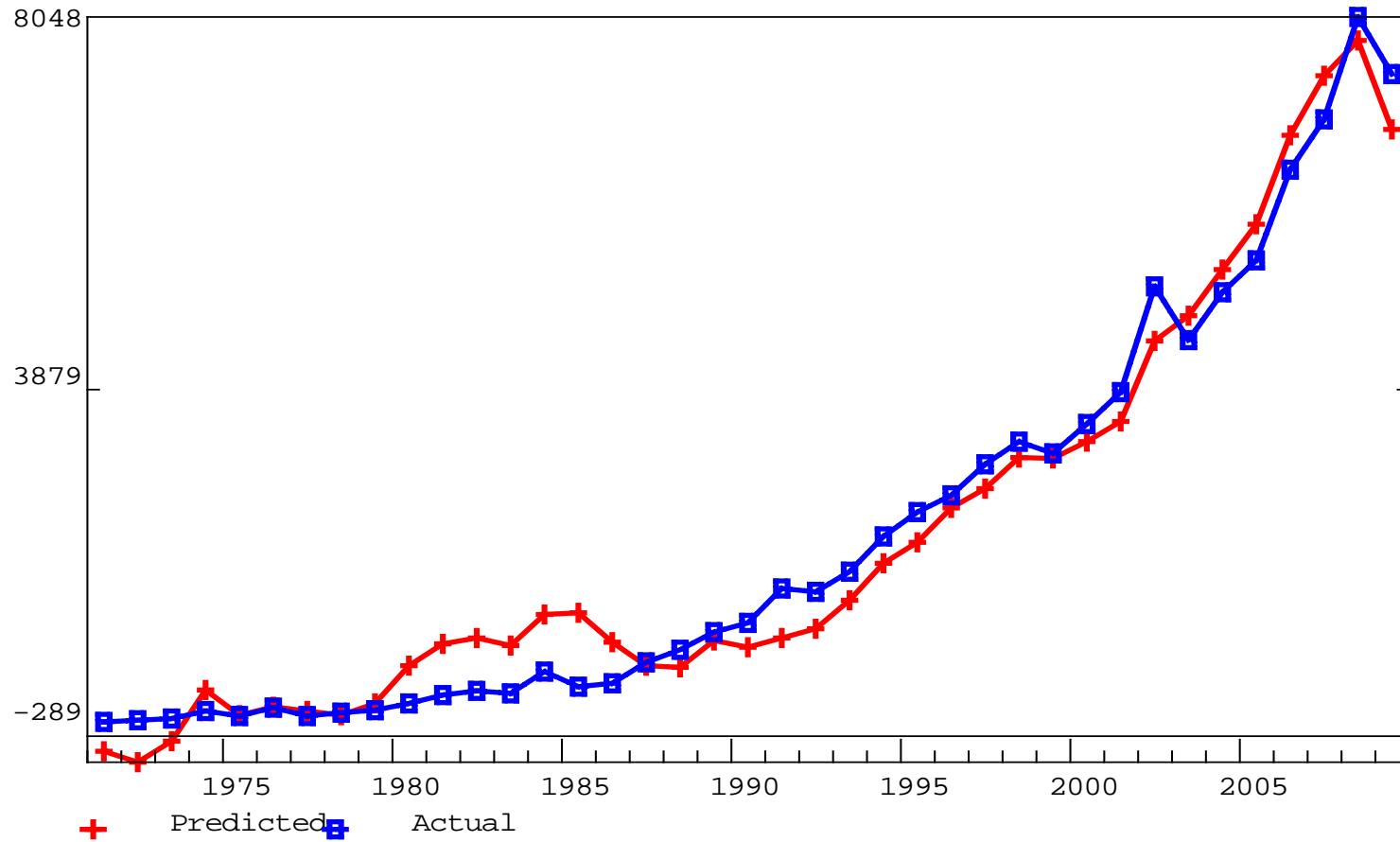
# EXPORTS

## 2 Coal mining EXPORTS



# IMPORTS

## 8 Textiles IMPORTS





# PRODUCTIVITY

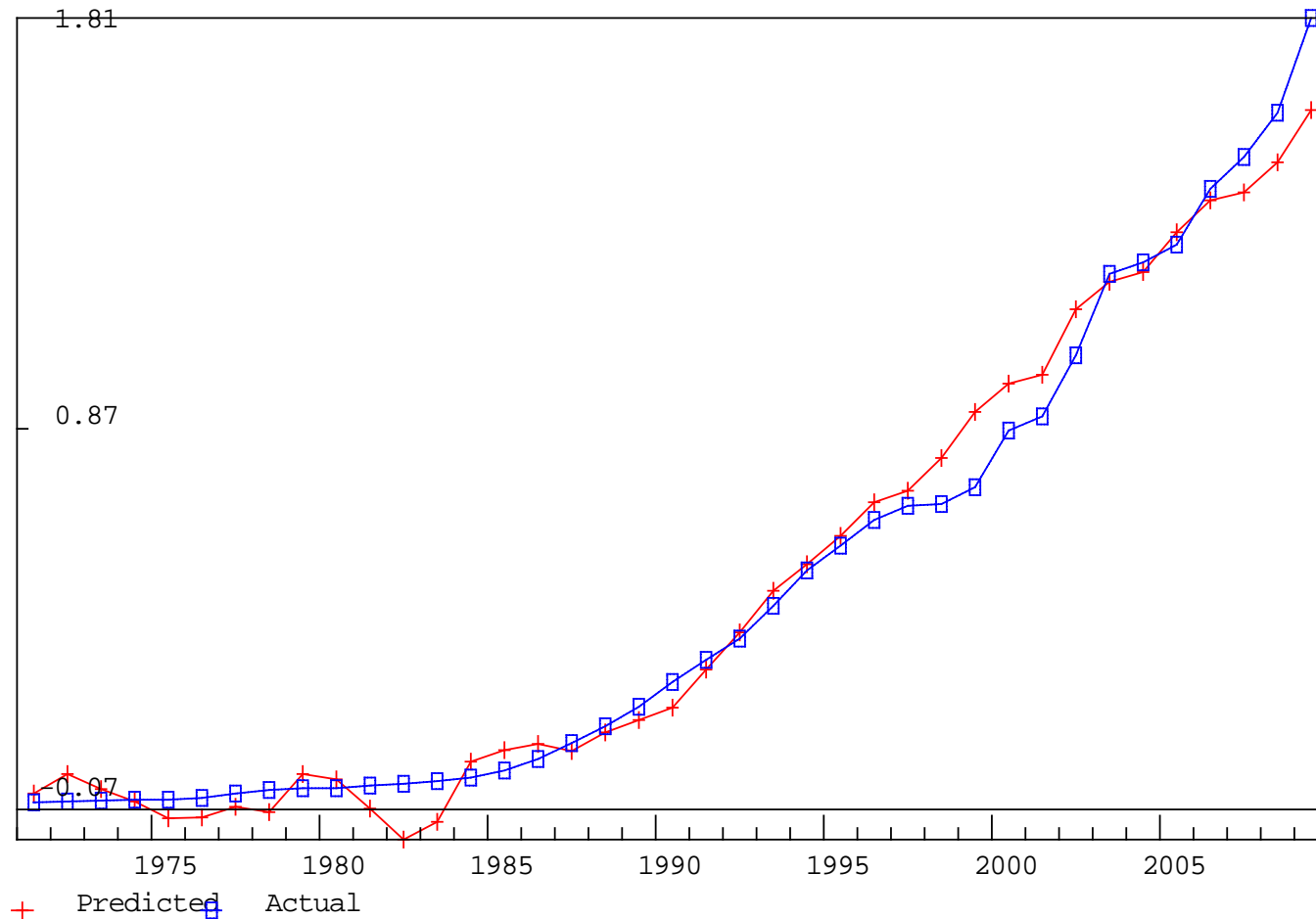
- Two main components that were used:
  - Labour productivity coefficient, and
  - Remuneration per employee

*Labour productivity coefficient =  $f(\text{time}, \text{business cycle}, \text{fixed capital stock}/\text{employment})$*

*Remuneration per employee  
=  $f(\text{Inflation (CPI)}, \text{labour productivity coefficient})$*

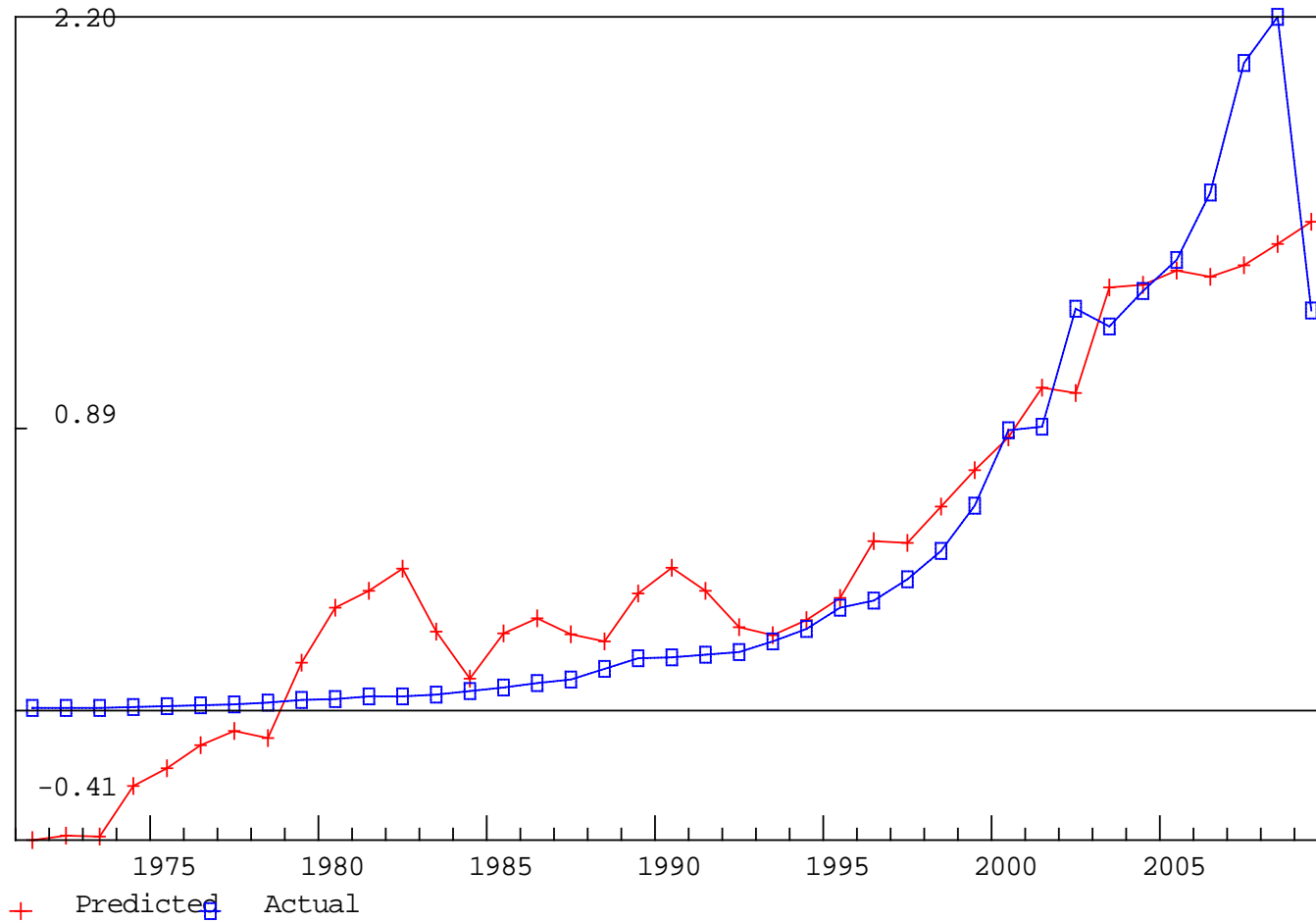
# PRODUCTIVITY (CONTINUE)

## 33 Electricity



# PRODUCTIVITY (CONTINUE)

## 22 Steel



# LONG-TERM GROWTH PROJECTIONS

GDP and Final Demand Components, constant  
2005 prices

GDP and Final Demand Components	2010 - 2030
Final consumption expenditure by Households	2.6%
• Durable goods	2.4%
• Semi-durable goods	3.0%
• Non-durable goods	2.4%
• Services	2.8%
Final consumption expenditure by Government	3.0%
Investment	4.0%
Exports	2.9%
Imports	3.8%
<b>Total GDP</b>	<b>3.5%</b>

# LONG-TERM GROWTH PROJECTIONS

## Estimated Long-Term GDP Growth of the 9 Main Sectors

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Main Economic Sector	GDP
Agriculture	2.9%
Mining	1.6%
Manufacturing	4.2%
Electricity, gas & water	2.6%
Construction	4.6%
Wholesale and retail trade, catering and accommodation	3.1%
Transport, storage and communication	4.0%
Financial intermediation, insurance, real estate and business services	3.9%
Community, social and personal services	3.3%
<b>Total South African Economy</b>	<b>3.5%</b>

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