INFLATION IN SOUTH AFRICA: 1921 TO 2006.
HISTORY, MEASUREMENT AND CREDIBILITY

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Submitted in fulfillment of the requirements for a PhD in the School of Development Studies,
University of KwaZulu-Natal, 2007

Date: 1 August 2007
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DECLARATION

This doctoral thesis represents original work by the author and has not been submitted in any other form to another university.

Where use has been made of the work of others, it has been duly acknowledged and referenced in the text.

The findings presented and conclusions arrived at in this doctoral thesis are entirely those of the author.

The research for this doctoral thesis was performed under the auspices of the School of Development Studies at the University of KwaZulu-Natal. Research was undertaken under the supervision of Professor Vishnu Padayachee during the period January 2006 to August 2007.
ABSTRACT

This study reports the development and use of an original methodology to measure inflation credibility, as well as the first results of such measurement in terms of an inflation credibility barometer. The barometer is an instrument measuring the degree of acceptance of the accuracy of historic inflation figures. Despite the lack of knowledge about inflation and the low inflation credibility recorded by this first calculation of an inflation credibility barometer for South Africa, valuable information about inflation is unveiled to the authorities. The research results serve as a benchmark, but cannot be compared to earlier research, as this study represents the first systematic measurement of inflation credibility in South Africa.

The barometer yields better results than the limited current international measurement of perceptions of the accuracy of historic inflation figures. The barometer (i) reports the credibility of inflation figures as a figure between zero and 100; (ii) will highlight changes in credibility over time with repeated use; (iii) can be explained easily to the general public; (iv) provides for international comparison between countries; and (v) can be used by all countries. The use of inflation credibility barometers and changes in barometer readings over time can also serve as an early warning system for changes in inflation perceptions that might feed through to inflation expectations.

Sampling results used to calculate a South African inflation credibility barometer show little public understanding of the rate of inflation. Owing to an increased focus on inflation figures in countries using an inflation-targeting monetary policy, central banks entrusted with such a policy should adopt a communication strategy highlighting the calculation and measurement of the rate of inflation. This study shows that no generally accepted international benchmarks for successful central-bank communication strategies have been developed, but the use of the methodology developed in this study will assist in the assessment of the effectiveness of communication strategies.

This study makes three further contributions of significance to available literature on inflation in South Africa. The first is an analysis of price increases and inflation over a period of 85 years
(1921 to 2006) and a selected comparison of salaries and remuneration over a period of 78 years (1929 to 2006). To this end data sets were developed for comparative purposes, thereby distinguishing between perception and reality about the accuracy of inflation figures over time. As this comparison has not been done before, a methodology was developed that can be used in future research. Based on these comparisons an inflation accuracy indicator (IAI) is developed for the first time. The research showed no systematic over or under-reporting of price increases, therefore confirming the general accuracy of the consumer price index (CPI) over time. As with the inflation credibility barometer, this methodology can be used internationally to confirm the accuracy of countries’ inflation figures over time. This methodology can also be used by developing countries with capacity constraints in economic modelling and forecasting.

The second contribution to available literature is the first analysis of South Africa’s experience with inflation over a period of 85 years from the perspective of the central bank. This analysis highlights not only the difficulties encountered by a central bank to contain inflation, but also focuses the attention on the policy errors of the authorities in their quest to contain rising prices.

The third contribution is an analysis of international and domestic initiatives aimed at improving the accuracy and measurement of inflation. The implications of these initiatives for developing countries are considered in the interest of a level international playing field between developed and developing countries.
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# LIST OF ABBREVIATIONS

## B
- Board of Governors of the Federal Reserve System (Fed)
- Bureau for Economic Research (BER)
- Bureau of Market Research (BMR)
- Bureau of Labor Statistics (BLS)

## C
- Central Statistical Service (CSS)
- Committee of Central Bank Governors (CCBG)
- Common Monetary Area (CMA)
- Consumer price index (CPI)
- CPI excluding changes in interest costs (CPIXX)
- CPI for metropolitan and other urban areas excluding changes in the interest costs of mortgage bonds (CPIX)

## D
- Demand for money/nominal demand for money balances (Md)
- Democratic Republic of the Congo (DRC)

## E
- European Central Bank (ECB)
- European Commission (EC)
- European Monetary System (EMS)
- Exchange rate mechanism (ERM)
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<td>F</td>
<td>Federal Economic Statistics Advisory Committee</td>
<td>FESAC</td>
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<td>Federal Open Market Committee</td>
<td>FOMC</td>
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<td>First Order Conditions</td>
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<td>G</td>
<td>Gross domestic product</td>
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<td>H</td>
<td>Harmonised index of consumer prices</td>
<td>HICP</td>
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<td>Household</td>
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<td>I</td>
<td>Income</td>
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<td><em>Indice Nacional de Precios al Consumidor</em></td>
<td>INPC</td>
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<td>Inflation accuracy indicator</td>
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<td></td>
<td>International Bank for Reconstruction and Development</td>
<td>World Bank</td>
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<td></td>
<td>Institute for Security Studies</td>
<td>ISS</td>
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<td></td>
<td>International Monetary Fund</td>
<td>IMF</td>
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<td>L</td>
<td>Less developed countries</td>
<td>LDCs</td>
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<td>M</td>
<td>Marginal benefit</td>
<td>MB</td>
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<td></td>
<td>Marginal cost</td>
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<td></td>
<td>Monetary Policy Committee</td>
<td>MPC</td>
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<td></td>
<td>Money supply</td>
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<td>Master of Business Administration</td>
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National Finance Corporation  NFC
New neoclassical synthesis  NNS
Non-accelerating inflation rate of unemployment  NAIRU

Organisation for Economic Co-operation and Development  OECD
Organisation for European Economic Co-operation  OEEC
Output  y
Owner-occupied housing  OOH

Penny  d
Policy Target Agreement  PTA
Prices  P
Production price index  PPI

Quantity  Q

Southern African Development Community  SADC
Standard error  SE
Statistical Office of the European Communities  Eurostat

The Commision of inquiry into the monetary system and monetary policy in South Africa  De Kock Commission
U
University of Stellenbosch  US
United Kingdom  UK
United States of America  United States
*Unidad de Fomento*  UF

V
Velocity of circulation of money  V
ACKNOWLEDGEMENTS

I wish to use this opportunity to thank many people and institutions for supporting this study. Although too many to mention all by name, I wish to highlight in particular the following:

- Prof M (Vishnu) Padayachee for the confidence he has put in me, and for his supervision of this study;
- Prof J A Lombard, retired Head of the Economics Department at the University of Pretoria and retired Senior Deputy Governor of the SA Reserve Bank, who introduced me to the study of economics;
- the invaluable assistance of Proff J H Martins and A A Ligthelm, and of Ms M E Maritz of the Bureau of Market Research of the University of South Africa, which is gratefully acknowledged;
- the Chairperson of the Ethics Committee of the Faculty of Economic and Management Sciences at the University of Pretoria, Prof R van Eyden, for permission to do research among students at that university;
- the Dean of Student Affairs at the University of Pretoria, Prof M T Speckman, for permission to do research among students at that university;
- the management and staff of Markinor;
- the Cillie family for the expenditure records of Dr G G Cillie;
- Proff P Engelbrecht and T de Coning and Ms G Arangies, all of the University of Stellenbosch, for information about the remuneration of professors at the University;
- Dr W Botha of the Stella Street Dutch Reformed Church in Pretoria for information about the remuneration of reverends;
- Mr H Pringle of the National Treasury for information about remuneration structures in the civil service;
- Mr G van de Wall, a retired Director-General, for valuable discussions on the remuneration structure of the civil service;
- Prof J F Potgieter, retired Director of the Institute for Planning Research at the University of Port Elizabeth (as it was known at the time);
- Ms I Gaspar of the SA Reserve Bank for translation assistance;
• Mr H H van Gass of the SA Reserve Bank for translation and other assistance;
• Library staff of the SA Reserve Bank;
• Dr E J van der Merwe, a retired Chief Economist of the SA Reserve Bank, for commenting on various aspects of this study;
• Ms A Mostert of the SA Reserve Bank for linguistic services;
• the SA Reserve Bank for financial and other assistance with this study; and
• my long-suffering family: Sunélle, my wife, and my son Malherbe and my daughter Carina, who have both grown considerably in the months that I have spent completing this study.

Soli Deo Gloria.

Jannie Rossouw

Pretoria