

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

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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.

**TABLE OF CONTENTS**

1. Introduction	1
2. Literature review	10
3. Measurement of inflation	70
4. Theoretical and conceptual framework: using anchors for monetary policy	97
5. South Africa's experience with inflation: a central bank perspective	147
6. South African price and salary changes measured against inflation since 1921	198
7. Measuring inflation credibility	229
8. Conclusions	283
9. References	293
10. Appendices	343

## LIST OF TABLES

Table 2.1	South African economic indicators for selected years	55
Table 2.2	Comparison of measures to assess inflation perceptions	66
Table 3.1	Composition of the overall CPI in metropolitan and other urban areas: selected weights, 2000	82
Table 3.2	Selected spending weights in metropolitan and other urban areas in South Africa, 2000	83
Table 3.3	Main components of CPI and CPIX in metropolitan and other urban areas, 1995 and 2000	87
Table 3.4	Average inflation rates in developed and selected emerging economies, 1949 – 1953 to 1980 – 1982	91
Table 3.5	Average inflation rates in developed and selected emerging economies, 1961 – 1970 to 1991 – 2000	92
Table 4.1	Possible outcomes of game theory between a central bank and private economic agents	103
Table 4.2	Countries targeting inflation in 2006	127
Table 4.3	Inflation targets in 2006	128
Table 4.4	Average inflation rates of South Africa, 1961 – 1970 to 2001 – 2006	130
Table 4.5	Experience with containing inflation in selected inflation-targeting and non-targeting countries over different periods	135
Table 5.1	Money supply growth targets, 1986 to 1989	180
Table 6.1	Historic prices adjusted in accordance with relevant changes in CPI, 1988 to 2006	208
Table 6.2	Historic annual salaries, projected salaries and actual salaries of a number of identifiable positions, various periods	214
Table 6.3	Annual salaries and cost-to-employer remuneration of two civil service positions, November 1984	216
Table 6.4	Annual top-notch salaries and cost-to-employer remuneration of two civil service positions, July 2005	218

Table 6.5	Inflation adjustment of the salaries and remuneration packages of an Assistant-Director and a Director-General, 1984 to 2005	219
Table 6.6	After-tax incomes of an Assistant-Director and a Director-General, 1984 and 2005	220
Table 6.7	Inflation adjustment of the after-tax remuneration of an Assistant-Director and a Director-General, 1984 and 2005	222
Table 6.8	Comparable affordability of houses, 1984 and 2005	223
Table 7.1	Summary of inflation expectation survey results, third quarter 2006	232
Table 7.2	Percentage increase in prices of selected items between August 2004 and August 2005	234
Table 7.3	Distribution of inflation credibility barometers in subsamples according to gender and population groups of a class of 2006 EKN 215 students	245
Table 7.4	Responses of all respondents and according to subsample of population groups	250
Table 7.5	Distribution of inflation credibility barometers in subsamples according to gender in terms of Asians, Blacks, Coloureds and Whites	251
Table 7.6	Inflation credibility barometer of CPI figures according to faculty, based on acceptance of CPI figures by respondents	252
Table 7.7	Macroeconomic convergence criteria and goals for SADC, 2008 to 2018	276
Table 7.8	Goal for SADC inflation rates: single digits by 2008	278

**LIST OF FIGURES**

- Figure 7.1 Perceptions on how well government is controlling inflation compared with actual rate of South African inflation, 1995 to 2006 236
- Figure 7.2 Inflation credibility: summary results of the surveys of the credibility of CPI and CPIX, respectively 243



## LIST OF APPENDICES

### APPENDIX A

Table A1	South African annual inflation rate measured as changes in CPI, 1921 to 2006	343
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### APPENDIX B

Table B1	South African CPI, 2000 = 100	344
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### APPENDIX C

Table C1	South African CPI, 1922 = 100	345
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### APPENDIX D

Table D1	Real interest rates, 1980 to 2006	346
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### APPENDIX E

Table E1	Overview of schools of thought in macroeconomics	347
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### APPENDIX F

Table F1	Issues in respect of the composition of CPI identified by OECD countries	348
----------	--	-----

### APPENDIX G

Table G1	Total annual spending of households in cash and in kind and composition of CPI, 2000	349
----------	---	-----

### APPENDIX H

Table H1	Weighted average retail prices in nine cities, 1921, adjusted in accordance with change in CPI, 1921 to 2006, and for metrification	350
----------	--	-----

### APPENDIX I

Table I1	Historic prices adjusted in accordance with change in CPI, 1938 to 2006	351
----------	---	-----

**APPENDIX J**

Table J1	Historic prices adjusted in accordance with relevant changes in CPI, relevant period to 2006	352
----------	--	-----

**APPENDIX K**

Table K1	Average prices at three stores in Pretoria, March 2004, adjusted with changes in CPI to projected prices in 2006	353
----------	--	-----

**APPENDIX L**

Table L1	Comparison of projected prices of selected goods and services with actual prices, June 2006	355
----------	---	-----

**APPENDIX M**

Table M1	Comparison of actual and projected prices of selected goods, 1974 to 2006	358
Table M2	Comparison of actual and projected prices of selected goods, 1984 to 2006	359
Table M3	Comparison of actual and projected prices of selected goods, 1994 to 2006	361
Table M4	Comparison of actual and projected prices of selected goods, 2004 to 2006	363

**APPENDIX N**

Table N1	Income tax on salaries and bonuses of married tax payers, 1985 tax year	365
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**APPENDIX O**

Table O1	Income tax on salaries, bonuses and fringe benefits of individual tax payers, 2006 tax year	366
----------	---	-----

**APPENDIX P**

Questionnaire to establish the credibility of published official inflation figures	367
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**APPENDIX Q**

Additional questionnaire to establish the credibility of published official inflation figures used for inflation-targeting purposes 368

**APPENDIX R**

Analysis of questionnaires to establish the credibility of published official inflation figures completed by MBA preparatory students 369

**APPENDIX S**

Analysis of questionnaires to establish the credibility of published official inflation figures completed by EKN 213 students 370

**APPENDIX T**

Analysis of questionnaires to establish the credibility of published official inflation figures completed by EKN 215 students 371

**APPENDIX U**

Questionnaire to establish the credibility of published official inflation figures 372

**APPENDIX V**

Questionnaire to establish the credibility of published official inflation figures used for inflation-targeting purposes 373

**APPENDIX W**

Questionnaire 374

**APPENDIX X**

Tax invoice: Markinor 375

**APPENDIX Y**

Questionnaire 376

**APPENDIX Z**

Table Z1	Responses about the accuracy of inflation figures according to gender and age in terms of Asians, Blacks, Coloureds and Whites	377
----------	--	-----

**APPENDIX AA**

Table AA1	Responses about the accuracy of inflation figures according to employment and education	378
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**APPENDIX BB**

Table BB1	Responses about the accuracy of inflation figures according to monthly household income	379
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**APPENDIX CC**

Table CC1	Responses about the accuracy of inflation figures according to province	380
-----------	---	-----

**APPENDIX DD**

Table DD1	Responses about the accuracy of inflation figures according to community size and home language	381
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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

## F

Federal Economic Statistics Advisory Committee	FESAC
Federal Open Market Committee	FOMC
First Order Conditions	FOC

## G

Gross domestic product	GDP
------------------------	-----

## H

Harmonised index of consumer prices	HICP
Household	HH

## I

Income	Y
<i>Indice Nacional de Precios al Consumidor</i>	INPC
Inflation accuracy indicator	IAI
International Bank for Reconstruction and Development	World Bank
Institute for Security Studies	ISS
International Monetary Fund	IMF

## L

Less developed countries	LDCs
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## M

Marginal benefit	MB
Marginal cost	MC
Monetary Policy Committee	MPC
Money supply	M
Master of Business Administration	MBA

## N

National Finance Corporation	NFC
New neoclassical synthesis	NNS
Non-accelerating inflation rate of unemployment	NAIRU

## O

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

## P

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

## Q

Quantity	Q
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## S

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

## T

The Commission of inquiry into the monetary system and monetary policy in South Africa	De Kock Commission
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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



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Pretoria