

Global Purchasing Power Parities and Real Expenditures

2005 INTERNATIONAL COMPARISON PROGRAM



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ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank	EKS	Éltető, Köves, and Szulc
AfDB	African Development Bank	EKS*	EKS method extended to include a stratification of product price within basic headings into representative and nonrepresentative categories
BOCC	Basket of Construction Components		
c.i.f.	Cost, Insurance, and Freight		
CIS	Commonwealth of Independent States		
CISSTAT	Statistical Office of the Commonwealth of Independent States	ESCWA	Economic and Social Commission for Western Asia
COFOG	Classification of the Functions of Government	EU	European Union
COICOP	Classification of Individual Consumption According to Purpose	FISIM	Financial Intermediation Services Indirectly Measured
CPD	Country-Product-Dummy	f.o.b.	Free On Board
CPI	Consumer Price Index	GDP	Gross Domestic Product
DCF	Data Collection Form	GFCF	Gross Fixed Capital Formation
DECDG	Development Economics Data Group	GK	Geary-Khamis
DPM	Data Processing Module	GNI	Gross National Income
DVM	Data Validation Module	ICP	International Comparison Program
ECC	Equipment, Construction, and Compensation	ISTAT	Italian National Statistical Office
ECLAC	Economic Commission for Latin America and the Caribbean	Lao PDR	Lao People's Democratic Republic
ECP	European Comparison Program	LCU	Local Currency Unit
EEC	European Economic Community	Ln	Natural Logarithm
EFTA	European Free Trade Association	MER	Market exchange rate
		n.e.c.	Not Elsewhere Classified
		NBS	National Bureau of Statistics of China
		NGO	Nongovernmental Organization

NPISH	Nonprofit Institution Serving Households	SPD	Structured Product Description
OECD	Organisation for Economic Co-operation and Development	TAG	Technical Advisory Group
OEEC	Organisation for European Economic Co-operation	U.K.	United Kingdom
PCM	Price Collection Module	UN	United Nations
PLI	Price Level Index	UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
PPP	Purchasing Power Parity	UNSC	United Nations Statistical Commission
Rosstat	Federal State Statistics Service of the Russian Federation	UNSD	United Nations Statistics Division
SGER	Secondary (School) Gross Enrollment Rate	U.S.	United States
SNA	System of National Accounts	VAT	Value Added Tax
		WDI	World Development Indicators
		WDM	Weights Diagnostic Module

PREFACE

This publication presents the results of the 2005 International Comparison Program (ICP), which was led and coordinated by the World Bank during 2003–08. The size and complexity of this important statistical project made it imperative to distribute the tasks by geographic regions. Data collection was overseen by regional coordinating agencies, which compiled the results and produced regional estimates of purchasing power parities (PPPs). Throughout the process, the regional coordinators worked closely with the ICP global office at the World Bank. The strong partnership with the Eurostat-OECD and its parallel program made it possible to combine the results from the two efforts for this publication.

The final step of the ICP has been the linking of regional results into a global data set so that economic activity and price levels can be compared between economies in different regions. These global results were produced using a new technique known as the “ring comparison.” This publication comprises the results for 146 economies obtained through this linking process. The number of participating economies far exceeds that of previous rounds.

On behalf of the World Bank and the ICP Executive Board, we would like to thank all those who have contributed to making the 2005 ICP such a resounding success. It has been a great team effort. We cannot give credit, in this limited space, to all of the individuals responsible for

its successful completion. Many are listed in the acknowledgments that follow. Here we would like to highlight the efforts of some special groups.

We are very pleased to say that the program has greatly benefited from the overwhelming support it received from national statistical offices and other participating agencies. The success of such a huge and complex undertaking depends critically on the active cooperation of the agencies involved in collecting the data in each economy. Some of the processes we used were new and untested, and the spirit in which everyone tackled the problems that inevitably arose in the course of this groundbreaking work has been truly gratifying.

We would especially like to thank the staff of the regional coordinating agencies—namely, the African Development Bank (AfDB), the Asian Development Bank (ADB), Statistics Canada, the Economic Commission for Latin America and the Caribbean (ECLAC), the Economic and Social Commission for Western Asia (ESCWA), the Statistical Office of the Commonwealth of Independent States (CIS-STAT), the Federal State Statistics Service of the Russian Federation (Rosstat), and the Bureau of Economic Analysis (Moscow)—which have invested so much effort into setting up regional product lists, training statistical office staff in the concepts underlying PPPs, and addressing the practical issues associated with collecting and editing the data

and compiling the PPPs and related statistics for each of the regions. We also want to thank Eurostat and OECD for providing their experience, expertise, and overall support for the regional and ring comparisons.

When the United Nations Statistical Commission gave the go-ahead to this ICP round at its 2002 meeting, it emphasized that the project had to have a strong governance structure. The Executive Board was set up to provide this governance. The Board and its members have had a major impact on the program, and we would like to thank them all for their contributions.

The project would not have been such a success without the invaluable inputs from members of the Technical Advisory Group. We appreciate the wholehearted and enthusiastic manner in which they conducted their various discussions—both at meetings in Washington and via emails.

Our special thanks go to the major donors, whose contributions were so important in bringing the program to fruition. Contributors to the Global Trust Fund include the U.K. Department for International Development, the International Monetary Fund, the Australian Agency for International Development, and the United Nations Development Programme. The World Bank made significant contributions to both the global and regional programs, as did numerous regional agencies.

We would like to congratulate the global office team at the World Bank. They have faced many challenges and obstacles over the past four years or so, but their perseverance and unwavering commitment to the project have ultimately helped them overcome all the odds. They have succeeded not only in producing a very important set of statistical indicators but also in refining important concepts underlying international comparisons, developing new tools to make data collection and compilation easier and more transparent, and setting up a firm basis on which future ICPs can be launched.

We hope that users will find the report useful. These data represent the most comprehensive survey of prices ever undertaken. As with any statistical exercise, there are limitations to the data, and these are highlighted in the report. We welcome any comments and suggestions for their improvement.

Finally, to everyone involved in this enormous task, thanks very much for a job well done!

Dennis Trewin
Chairman
ICP Executive Board

Shaida Badiee
Director
Development Data Group
World Bank

ACKNOWLEDGMENTS

The ICP shares a common technical language and conceptual framework with national statistical programs for measuring consumer prices indexes (CPI) and their national accounts. The very essence of the ICP is based on comparability of results between economies, strict adherence to time schedules, and a common understanding of data-sharing and confidentiality requirements. There is no other statistical program requiring so much cooperation between national, regional, and international organizations.

The successful completion of ICP 2005 is a tribute to the organizations and people who worked in partnership to carry out the work program. The strength of the program came from the division of the work program into five ICP regions that worked in parallel with the Eurostat-OECD PPP program so that all data could be combined into a set of global results. The technical and managerial leadership furnished by all in partnership sets the example for future international programs. Although the donors to the global trust fund have been noted, special thanks also go to the Canadian International Development Agency for its financial support of the South America program, and to the Arab Development Fund in its support of Western Asia. The recent contribution from the Islamic Development Bank will form a strong basis for the program to move into the next round. Each of the regional coordinating organizations also provided financial support, either in-kind, with funds, or both.

The 2005 ICP methodology was reengineered to overcome previous problems. The Technical Advisory Group (TAG) led by Alan Heston made significant contributions. The other TAG members were Angus Deaton, Erwin Diewert, Paul Konijn, Paul McCarthy, Prasada Rao, David Roberts, Sergey Sergeev, Silke Stapel, and Kim Zieschang.

The global office of the ICP was located in the World Bank's Development Data Group (DECDG), led by Shaida Badiee, Director, and Misha Belkindas, Manager. The ICP team responsible for the overall global coordination and technical support comprised Olga Akcadag, Yonas Biru, Yuri Dikhanov, Nada Hamadeh, and Virginia Romand. Recognition for their efforts is also given to former ICP team members Giuliana Cane, Farah Hussain, Jinsook Lee, and Siew Hua Lee. Other members of DECDG providing valuable support to the ICP included Azita Amjadi, Lisa Burke, Sebastian Dessus, Olivier Dupriez, Ramgopal Erabelly, Richard Fix, Omar Hadi, Barbro Hexeberg, Hulda Hunter, Soong Sup Lee, Vilas Mandlekar, Changqing Sun, and Eric Swanson.

The complexity of the program required input from this large group of technical experts who served as consultants to the program: Sultan Ahmed, Derek Blades, Steven Burdette, Peter Hill, Anil Sawhney, and Kenneth Walsh.

The overall leadership and policy making came from the ICP Executive Board, which included high-level leadership from international, regional, and national statistics

organizations. The Board members and associated representatives included Dennis Trewin, Chair; Ifzal Ali and Bishnu Pant, Asian Development Bank; Shaïda Badiëe, World Bank; Paul Cheung, United Nations; Rob Edwards, IMF; David Fenwick, Office of National Statistics, United Kingdom; Enrico Giovannini, OECD; Peter Harper, Australian Bureau of Statistics; Ben Kiregyera, UN Economic Commission for Africa; Charles Lufumpa and Michel Mouyelo-Katoula, African Development Bank; Luis Machinea, Economic Commission for Latin America; Lars Norlund and Peter Everaers, Eurostat; Jacob Ryten, Statistics Canada; Pronab Sen, Ministry of Statistics and Programme Implementation, India; Vladimir Sokolin and Andrey Kosarev, Federal State

Statistics Service of the Russian Federation and Mikhail Korolov, Commonwealth of Independent States, Russia; Mervat Tallawy, UN Economic and Social Commission for Western Asia; and Fuzhan Xie and Langhui Huang, National Bureau of Statistics, China.

To all, it was a great privilege and pleasure to have the opportunity to work with such dedicated people and organizations.

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International Comparison Program