

**FIFTH MEETING OF THE ADVISORY GROUP
MONTREAL, CANADA, 9TH MAY 2006**

AGENDA ITEM 9

**REVIEW OF WORK BEING UNDERTAKEN ON MEASURES TO AMELIORATE
THE IMPACT OF VOLATILE CAPITAL FLOWS**

Background

ABAC Finance Working Group has been concerned at the limited efforts made in the international community to safeguard against the adverse impacts of volatile capital flows and the activities of hedge funds and highly leveraged institutions.

ABAC has made recommendations to APEC Leaders and Finance Ministers to take action to improve monitoring and dissemination of data as one important measure to deal with this problem. In 2005 ABAC commissioned a report from Professor Dietrich, of the Marshall School of Business University of Southern California to assess the current policy environment in relation to volatile flows and to discuss whether forms of circuit breakers might be a useful measure that economies might consider. His report was considered and accepted by ABAC at its meeting in Singapore in January this year. A copy of the Executive Summary and the Conclusions are attached – attachment 1 to this note. A full copy of the report can be found on the ABAC web-site. Attachment 2 is a supplementary paper on Early Warning Signals – also considered at the January ABAC meeting.

ABAC has commissioned a further report from Professor Dietrich requiring a study of on data requirements to support early warning signals to ameliorate the impact of adverse volatile capital flows. Specifically, the study should:

- draw on work already conducted and reviewed by ABAC
- review the key indicators to support early warning signals as these are evolving in international agencies, identify deficiencies and make recommendations as to how these might best be remedied
- review the policy recommendations of the IMF, the Finance Stability Forum, the BIS, the OECD, ADB and other relevant agencies
- assess the efficacy of the coverage of existing data bases compiled by major international agencies and regional agencies
- assess the role of central banks and statistical agencies in selected APEC economies in the provision of data and its timeliness
- assess data coverage of the activities of hedge funds and derivative markets and their relevance to volatile capital flows
- assess the views of major private sector financial institutions in the evaluation of early warning signals/systems and their views on how they might be improved and made more relevant.

Professor Dietrich will be present at Montreal to provide an outline of how this study is being handled and any preliminary observations he may have at this juncture.

Recommendations

- Review and advise on matters you deem relevant arising in connection with the proposed new study, and on the attachments to this note, including suggestions on experts who Professor Dietrich could usefully consult with and on relevant data sources which would contribute to the Study.

Coordinator

24th April 2006



ABAC LOGO
ITEM 5 PART 1

Volatile Capital Flows: Assessment of the Current Policy Environment

Principal Investigator:

J. KIMBALL DIETRICH, UNIVERSITY OF SOUTHERN CALIFORNIA

Collaborators:

Carlos Budnevich, Universidad Finis Terrae

Kevin Cohlglazier, CMG First State Investments

Ching Ma, University of Southern California

Igor Cialenko, University of Southern California

JANUARY 10, 2006

This paper reviews the international economic and financial situation currently and compares it to the 1990's and concludes that conditions are very different: it is unlikely that a crisis similar to those of the earlier period will occur now. Capital controls in the 1990s are examined in detail and two examples of the most highly regarded implementation of them – Chile and Malaysia – provide evidence that capital controls have a debatable and inconclusive effect on the variables policymakers are concerned with. Two types policy interventions, “circuit breakers” and “bank holidays,” are described and used to define a spectrum of possible innovative controls to consider. This analysis concludes that innovative policies promising desired results different from those due to the types of capital controls tried in the past are difficult if not impossible to identify. The paper concludes that ABAC should advocate: (1) improvement in collection and dissemination of data useful in assessing potential liquidity problems and required by “early warning systems;” (2) possible controls on the flow of international capital should carefully weigh the short-term advantages, if any, against long-term costs, and if controls are implemented, implementation should be predictable and the controls transparent in application and neutral in impact; (3) policy discussions should focus reactions to the most likely crisis under current circumstances, for example a precipitous adjustment to the dollar in response to accumulating global imbalances.

Volatile Capital Flows: Assessment of the Current Policy Environment

J. Kimball Dietrich, Principle Investigator
Marshall School of Business
University of Southern California

EXECUTIVE SUMMARY

The current economic and financial market situation among the APEC emerging economies is substantially different than it was in the crisis period of the 1990s. With the floating of the Chinese and Malaysian currencies in July 2005, few of the regional currencies have a fixed peg to the dollar and most exchange rates demonstrate substantial variability. International reserve accumulations by emerging market economies in general are large, trade and capital accounts are roughly in balance compared to the large capital inflows and trade deficits characteristic of the crisis economies in the 1990's. Market conditions are improved, with valuations of stocks in general and of the financial sector strong, and of course, substantial changes in the capitalization and regulation of the financial sector has been undertaken since the crisis years. Hedge funds are on average smaller, less highly leveraged, more carefully scrutinized by their lenders, and pursue more heterogeneous strategies than in the 1990's.

Based on a review of capital controls imposed by APEC emerging economies, with a particular focus on the most positively assessed use of controls by Chile and Malaysia, the conclusion is that capital controls have a limited effect on policy variables of interest in most economies. Even in the economies believed to have successfully used controls, the effects are difficult to detect and unintended consequences of controls are believed by many to have had negative long-term impacts and costs.

This study intended to identify possible innovations in capital controls useful in reducing costs and increasing the effectiveness of controls used in future international financial crises. Analysis of circuit breakers on organized exchanges reveals their limited usefulness in controlling international capital movements. Controlling payment flows through system-wide payment halts, as in bank holidays, reveals the large costs and indiscriminate impacts of the measure. Controls on specific transactions by halting certain payments are difficult to implement and have costly implications. The conclusion is that controls used in the past, combined with transparency in application and clarity on their invocation, are the least distorting and costly types of controls, but as always present challenges in definition and implementation. Furthermore, growth in derivative markets makes controls based on domestic institution activity of limited impact on speculation.

Recommendations presented in the report aim at improving the ability to reduce the costs of financial crises. In short, recommendations are: (1) improve data collection in terms of coverage, timeliness, and quality; (2) limit the use of controls to pre-announced trigger levels using tried methods like specified transaction taxes but understand the ease of evasion and the distortions such taxes cause over the long run and the damage they cause to market reputation; and (3) advocate concerted efforts to analyze likely future crises.

IV. SUMMARY: PROPOSAL FOR ABAC POLICY RECOMMENDATIONS

The goal of APEC and ABAC is to promote open and integrated capital markets. Capital controls, by their nature, interfere with this goal. This paper demonstrates that these controls rarely

produce their desired objectives and are often accompanied by negative unintended consequences. However, the costs of past financial crises experienced by APEC emerging economies and presumed to result from volatile capital flows has been large and may justify consideration of innovative capital market interventions.

The analysis in this paper supports the conclusion that the likelihood of anticipating and avoiding likely crises would be enormously enhanced with better and more timely data on capital flows, financial institution assets and liabilities, and on activity in derivative markets. This fact is nearly universally accepted but there has been little progress in improving data available. Thus, the first and least controversial recommendation is:

INTERNATIONAL INSTITUTIONS, INDIVIDUAL ECONOMY CENTRAL BANKS, FINANCE MINISTRIES, ECONOMIC RESEARCH BUREAUS, AND REGULATORS SHOULD BE ENCOURAGED TO COOPERATE IN AN EFFORT TO IMPROVE THE QUALITY, TIMELINESS, AVAILABILITY, COMPARABILITY AND CREDIBILITY OF INTERNATIONAL FINANCIAL CAPITAL FLOW STATISTICS AND RELATED MACROECONOMIC AND FINANCIAL MARKET DATA.

THE ANALYSIS OF THE USE OF CAPITAL CONTROLS IN THE 1990S AND CONSIDERATION OF POSSIBLE INNOVATIVE METHODS OF AVOIDING CRISES OR MITIGATING THE COSTS OF FINANCIAL CRISES LEADS TO THE CONCLUSION THAT ANY FUTURE CONTROLS WILL PROBABLY RESEMBLE THOSE USED IN THE PAST. CAPITAL CONTROLS, IF IMPOSED, ARE LESS COSTLY IF THEY ARE TRANSPARENT IN APPLICATION AND CAPITAL FLOW RESTRICTIONS IDEALLY SHOULD BE IMPOSED ONLY UNDER CONDITIONS THAT MARKET PARTICIPANTS CAN ANTICIPATE AND PLAN FOR. HOWEVER, CAPITAL CONTROLS SHOULD BE IMPLEMENTED RELUCTANTLY (IF AT ALL), AND SHOULD BE RELATIVELY STRAIGHTFORWARD IN APPLICATION. THE SECOND AND SUBSTANTIALLY MORE CONTROVERSIAL RECOMMENDATION BASED ON THIS ANALYSIS IS:

CAPITAL CONTROLS SHOULD BE IMPLEMENTED RELUCTANTLY AND TEMPORARILY AND SHOULD BE INVOKED ONLY IN THE CASE OF EASILY IDENTIFIED CHANGES IN MARKET CONDITIONS (I.E. LINKED TO READILY OBSERVABLE MARKET

OUTCOMES). THE LEAST COSTLY AND LESS DISTORTING METHOD IS A TRANSACTION TAX, BUT THOSE IMPLEMENTING THESE TAXES MUST BE AWARE THAT ATTEMPTING TO LIMIT SPECIFIC TYPES OF CAPITAL TRANSACTIONS UNDER CURRENT MARKET CONDITIONS MAY HAVE LIMITED EFFECTIVENESS AND CAN ENTAIL LARGE REPUTATION COSTS FOR THE MARKET AND THE ECONOMY IMPOSING CAPITAL CONTROLS.

FINALLY, POLICY MAKERS SHOULD NOT FOCUS ON PAST CONDITIONS IN ASSESSING THE TYPES OF CRISES THAT MIGHT OCCUR. THE CURRENT SITUATION IS VERY DIFFERENT THAN THAT OF THE 1990S. AND THE LIKELY DISTURBANCES OR SHOCKS TO FINANCIAL MARKETS WILL LIKE COME FROM DIFFERENT SOURCES, LIKE A DOLLAR CRISIS. A CRISIS OF THIS TYPE WILL HAVE VERY DIFFERENT GLOBAL AND REGIONAL IMPLICATIONS THAN THE ASSAULTS ON APEC ECONOMY FINANCIAL SYSTEMS IN THE PAST. THE LAST RECOMMENDATION IS:

A CONCERTED EFFORT SHOULD BE MADE BY POLICYMAKERS IN APEC AND IN THE APEC ECONOMIES TO CAREFULLY ANALYZE THE LIKELY TYPES OF FINANCIAL CRISES IN THE FUTURE GIVEN CURRENT ECONOMIC CONDITIONS AND UPDATE THESE ASSESSMENTS WITH FUTURE ECONOMIC CHANGES, DISSEMINATE CONCERNS ABOUT POSSIBLE DISTURBANCES OR SHOCKS TO OFFICIALS AND REGULATORS IN THE REGION, AND ENCOURAGE POLICYMAKERS TO PLAN SPECIFIC POLICY RESPONSES, IF ANY, TO THE ANTICIPATED NATURE OF POSSIBLE FUTURE CRISES.

Early Warning Signals of a Deteriorating Economy **INFORMATION AND STATISTICAL DATABASES**

By

Byron Pakula
(Economics Research, Monash University)
Ken Waller
(Coordinator, ABAC FWG)

INTRODUCTION

1. Financial crises or deteriorating external situations of an economy can be devastating, as seen in recent history by the 1990s crises within Latin America and the 1997 Asian Financial Crisis. The potential costs and losses of financial crisis may be minimised however with adequate early warning signals. The role of statistical databases has become much more prominent after recent crises on the grounds that EWS should contribute to minimising market failures and the misallocation of resources by reducing information asymmetry between investors and savers.
2. This paper considers the role of information in EWS, specifically the role of statistical databases provided predominantly by multilateral organisations and national governments, and suggests improvements to data and surveillance measures in an endeavour to for more effective early warning signals. (The paper may be considered as an additional piece of information to the paper by Professor Kim Dietrich.).

EARLY WARNING SIGNALS OF A DETERIORATING ECONOMY

3. An externally induced financial crisis is caused by an imbalance of exchange rates, monetary policies, and capital flows. The "impossible trinity" (noted in Professor Dietrich's paper) observes that an economy must determine to manage two out of three variables mentioned; in short, two variables only can be fixed and the third flexible. In summary an economy must choose between managing monetary policy or the exchange rate. By monitoring three key aspects of the financial system (exchange rates, monetary policies, and capital flows), the data so assembled may provide a valuable guide or an early warning of a pending deteriorating external situation.
4. Exchange rate information (real exchange rate, terms of trade, equity prices) have traditionally been of good quality, timely, and readily available to investors, policy makers, and the general public. This is specifically the case for economies that are well integrated into the global financial system, as large numbers of transactions ensures that the exchange rate reflects true values. Information is also readily available on exchange rate volatility in a time series manner and this is useful for detecting trends. Other useful information concerns changes to the level of foreign exchange reserves, specifically in a pegged or fixed exchange rate regime as foreign reserves, as noted by Professor Dietrich, are important to long-term sustainability.
5. Important monetary data includes data on money supply (M1 real balance, M2 growth rates, bank deposits, and domestic credit) and interest rates (domestic/foreign interest rate

differentials and levels). Interest rate information is almost always in the public domain and readily available to the financial sector. However, data on money supply may be less readily available in a timely and accurate manner, although this data can be most useful as a signal of a deteriorating monetary situation. It is worth noting that data on monetary policy aggregates is wholly dependent upon the quality of government agencies and their collection and analytical capacities. (This may be an issue in emerging markets which may have limited access to skilled resources).

6. Liquidity constraints are often the clear manifestation of a banking and currency crisis, for example the 1994 Mexican Peso Crisis or the 1997 Asian Financial Crisis; the crises were exacerbated by the shortage of resources to meet high volumes of short-term international liabilities. Information and data that is useful for analysing liquidity positions include detailed and timely short-term liabilities and asset positions, and the level of foreign currency reserves and the maturity profiles.
7. Balance of payment data is extremely important in signifying changes in trends in the external account. BOP includes capital flows (net private capital flows as a percentage of GDP, FDI, short term capital flows) and current accounts (current account balance as a percentage of GDP and investment). Balance of payment information can be a predictor of a deteriorating economy in both the current and capital account components.
8. Stock market indices provide invaluable information to the direction of an economy. Specifically, financial firm indices account for potential borrowing and lending practices that impact for example the level of non-performing levels that played a significant role in the Asian Financial Crisis. Moreover, the derivatives market provides a good barometer of risk management, while credit ratings and institutional investor sentiment provide necessary information of future expectations. Where stock markets exist, accurate and timely data is usually available. However, stock market data in some emerging markets may be inadequate or markets too small to reflect real business sentiment.
9. It is worth noting that Early Warning Systems (EWS) are econometric forecasting and surveillance models that rely upon timely and detailed data and information to detect imbalances in the financial systems. EWS have become important tools in recent history for policy makers and investors alike. These models assist in predicting deteriorating currency or banking situations by analysing generally over 25 leading indicators that span the real and monetary sectors, current and capital accounts of the balance of payments, market variables to capture expectations of future events, and proxies for the structural changes in an economy. Regressions and analysis of the pooled cross-section time-series data is undertaken to identify and rank the lesser performing economies. However, the quality of the models and the accuracy of the models forecasting is fully dependent upon the quality of the information imputed.

EXISTING INFORMATION AND STATISTICAL DATABASES

Information on the access to various web-sites of international agencies and to the types of data currently assembled by them is shown in Appendix 1; a second Appendix gives an outline of the data used for one EWS model

10. Multilateral financial institutions such as the International Monetary Fund, Asian Development Bank, World Bank and United Nations to a lesser degree, are the prime instruments for the dissemination of timely data of a high standard. However, while the multilateral organisations collate the data, it is predominantly the role of economies to collect the information, preferably in accordance with quality standards set by the multilateral organisations. The focus of this section is to highlight the organisations and

programs involved with collating the information for use in signalling a deteriorating economy.

11. International Monetary Fund: The IMF established in 1995 the General Data Dissemination System (GDDS) to provide timely and comprehensive statistics in the pursuit of sound macroeconomic policies, and in 1996 the Special Data Dissemination System (SDDS) to improve the functioning of financial markets by providing international capital markets access to economic and financial data. The GDDS and specifically the SDDS further aim to improve the quality and integrity of the disseminated data by identifying best practices in the four dimensions of economic and financial data: coverage, periodicity and timeliness; public access; integrity; and quality of the data. It is worth noting that with regard to detecting financial crises, the SDDS is the most relevant databank of the IMF due to its focus on the financial sector and short timeframes of data requirements.
12. As of November 2005, there were 61 voluntary members within the SDDS. The data is publicly available on an IMF-based bulletin board, complete with information of metadata (dissemination and collection practices). APEC members registered with the SDDS program include: Australia, Canada, Chile, Hong Kong SAR, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, Peru, Philippines, Russian Federation, Singapore, Thailand, and the United States of America. APEC members that are not currently registered with the SDDS program are: Brunei Darussalam, People's Republic of China, New Zealand, Papua New Guinea, Chinese Taipei, and Viet Nam.
13. The SDDS data is segregated into four categories with 18 components of which each component may have multiple measures.
 - a. Real Sector: national accounts (Quarterly), production index/indices (Monthly), labour market (Q), and price indices (M).
 - b. Fiscal Sector: general government or public sector operations (Annual or 2Q), central government operations (M), and central government debt (Q).
 - c. Financial Sector: analytical accounts of the banking sector (M), analytical accounts of the central bank (M), interest rates (Daily), and stock market (D).
 - d. External Sector: balance of payments (Q), international reserves and foreign currency liquidity (M), merchandise trade (M), international investment position (A), exchange rates (D), and external debt (Q).
14. This data is collated and analysed on a bi-quarterly frequency as part of the Financial Stability Forum's *Global Financial Stability Report*. This incorporates risk assessments, vulnerabilities and analysis of global financial market developments for emerging and mature markets. The aim of the report is to identify potential systematic weaknesses, thereby playing a significant role in the prevention of crises and contributing to global financial stability and sustained economic growth.
15. Asian Development Bank: During the APEC Finance Ministers meeting in 1997, the Manilla Action Plan or Manilla Framework was drawn up to assist economies in recovering from the financial crisis, and to prevent future crises. Within this framework, the importance of capacity building for gathering data and the need for disseminating information was reaffirmed. Moreover, as a multilateral development agency the ADB has contributed to the framework by assisting with financial sector development, specifically promoting economic growth and reducing the risk of financial crisis, partially by improving data and information dissemination. Relevant financial information provided by the ADB includes annual reports on Key Indicators, International Comparison Program, and Investment Climate and Productivity Survey.
16. Moreover, in 1999 the ADB established the Regional Economic Monitoring Unit (REMU) as a focal point for developing member countries to strengthen their economic monitoring by providing technical assistance for early warning systems. REMU assists the Manilla

Framework Group and ASEAN+3 Economic Review and Policy Dialogue through the preparation of high frequency reports and special studies, capacity building and promoting policy dialogue. The aim is to detect emerging macroeconomic, financial and corporate sector vulnerabilities to prevent further financial crises. The EWS models are to be based on data suitable for East Asian countries, however the technical assistance does not include improving data quality, frequency, nor availability.

17. Bank for International Settlements: The BIS and the Basel Committee on Banking Supervision jointly created the Financial Stability Institute in 1999 to assist supervisors around the world in improving and strengthening their financial systems. The main role of the Financial Stability Institute is capacity building within central banks and governments. However, the role of the BIS also includes disseminating information relevant for stakeholders. This includes quarterly data on locational banking statistics, consolidated banking statistics, securities statistics, derivatives statistics, triennial central bank surveys, and joint BIS-IMF-OECD-WB statistics on external debt. Thus, the BIS provides excellent up to date information on monetary and central bank policies. However, this data needs to be used in conjunction with other data sources in order to provide adequate early warning signals of financial instability.
18. World Bank: The WB promotes statistical capacity building, with reference to the financial sector but specifically related to economic and social development indicators. This is undertaken through PARIS21, a consortium set up in 1999 specifically related to statistical capacity building. However, with regard to the provision of statistical information directly related to financial stability as opposed to general economic and social stability, the WB works in close collaboration with the IMF on GDDS and SDDS.
19. United Nations: The UN Statistical Division's Monthly Bulletin of Statistics (MBS) Online presents current economic statistics for most of the countries and areas of the world. The MBS tables include population, industrial production indices, price indices, employment and earnings, energy commodities and fuel imports, iron ore production, manufacturing, transports, construction, international merchandise trade, and finance tables. Specifically, the financial monthly data includes exchange rates, money supply (money, reserve money), international reserves, gold reserves, government bonds interest rates, rates of discount of central banks, short-term interest rates, and markets prices of industrial shares indices. Whilst the data is timely, it is not as comprehensive as the IMF's SDDS for the purpose of providing early warning signals for financial crises.

Recommendations to Improvements to Data and Surveillance Measures

20. The Board of Executives at the IMF continues to strive for improvements in the data dissemination program. However, ways need to be found to encourage more economies to participate in the voluntary SDDS programs. ***One such way might well be through highlighting the benefits of enhancing economic stability through better data assessment and dissemination and in promoting this through a well-informed investor group.*** Moreover, the timeliness of the data is essential to the success of SDDS. As recently as 2001, the fourth review highlighted that up to 20% of monthly and quarterly data was disseminated after the deadlines. Although this has been partially addressed, continued improvements need to be achieved to ensure the aims of the SDDS and GDDS programmes are met. ***The usefulness of the data could be enhanced by having an investor group advise data disseminating agencies of the information and data that would aid them in determining the financial prospects of economies.***
21. The quality of data provided by the multilateral organisations such as the IMF's SDDS and GDDS programmes is only as useful as the quality of the data collected by policy and statistical agencies in individual economies. In developing countries where the possibility of a deteriorating external economy is greater, the capacities of these statistical departments tend to be more constrained. ***Therefore, to continue the improvements to data and***

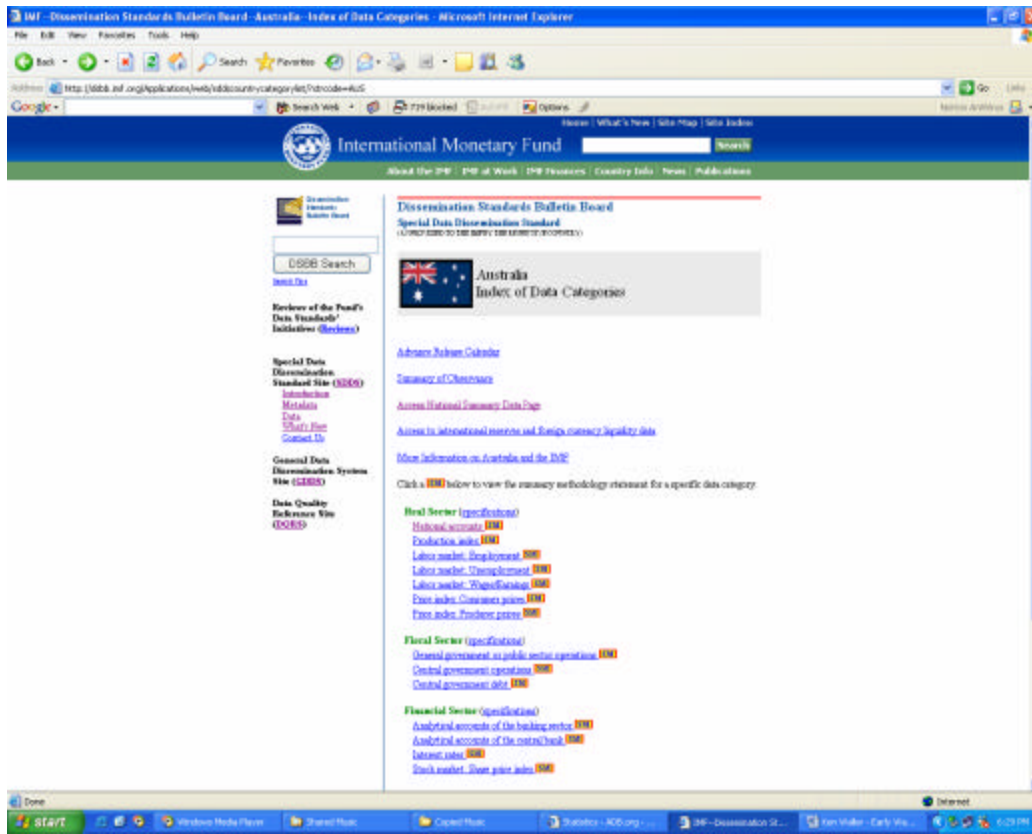
surveillance measured it is recommended that APEC push strongly, through their representatives on relevant multilateral bodies, for the expansion of programmes that aim to build capacity and improve the quality of data disseminated from state statistical departments, such as the IMF's Data Quality Reference Site and Data Quality Assessment Framework projects. Moreover, all APEC economies should give emphasis to participating in the SDDS program.

22. Whilst the ADB provides microeconomic and macroeconomic data through the programs and databases mentioned above, the information is unlikely to be adequate to provide a useful base for early warnings on financial stability. The longer-term perspective of the programs is not in doubt but rather the REMU could make a more useful contribution to financial stability if the ADB could incorporate specific technical assistance programs incorporating into its mission statement the objective of improving data dissemination that could be useful for the financial markets in assessing the financial stability of economies. As the Key Indicators and other annual statical reports already incorporate the relevant items of statistical information, it is envisaged that the ADB has the capacity and frameworks in place to expand its role to more frequent data dissemination. ***The expansion of the ADB and REMU into this area could prove to be beneficial to Asian economies and investors if the information it currently assembles is more targeted and detailed. However, care should be taken to ensure that any enlarged role for the ADB did not duplicate the work of the IMF or the BIS but rather complemented the work of those organisations.***
23. ***Finally, a more concerted effort to collate the available information and disseminate the data to stakeholders should be made by relevant multilateral agencies.*** There has been partial success in this with joint projects, such as that between the BIS-IMF-WB-OECD for external debt data. Further, the benefit of collating and joint projects would be greater with regards to specialised data sources, such as the Bank for International Settlements' data on securities and derivatives.

International Monetary Fund: SDDS

The data disseminated via SDDS is publicly available and provided by representative national governments. The website allows users to search the data by country or data category, metadata dimensions and specifications, provides information on forthcoming data releases, and guides on how to use the website. The information can be accessed online at:

<http://dsbb.imf.org/Applications/web/sddshome/>



Australia : Economic and Financial Data according to IMF Special Data Dissemination Standard - Microsoft Internet Explorer

Address: http://www.abs.gov.au/webdata/bdy/2003014.sdf/4a56303002a23e9425623b0021564769413050a642a2760ea00208d40open

Australian Bureau of Statistics
An agency of the Australian Government

Home | Fiscal Results | Australia | Services | Products | Contact Us | About Us | Information | News & Media | Education | Resources | Links

Advanced Search

Australia : Economic and Financial Data according to IMF Special Data Dissemination Standard

This page contains data released to 31 December 2005

REAL SECTOR **FISCAL SECTOR** **FINANCIAL SECTOR** **EXTERNAL SECTOR**

The data shown on this page are the main economic and financial aggregates produced by the ABS and other agencies. They are the data described on the International Monetary Fund's Dissemination Standards Bulletin Board (DSBB). For a fuller explanation of the DSBB and the statistical standards to which Australia has committed, please click on the [DSBB](#).

Figures are in millions of Australian dollars (\$m) unless otherwise specified.
Data is in original terms unless indicated specifically to be in seasonally adjusted or trend terms.

This page is updated as data become publicly available. For more detailed up-to-date data for many of the series, see [key national indicators](#).

REAL SECTOR SDBS Data Category and Component	Unit Description	Reference Period for Latest data	Latest data	Data for previous reference period	% change from previous reference period	Further information
National Accounts						
Gross Domestic Product (GDP)						
Current Prices, Seasonally adjusted						
Gross domestic product	\$m	Q305	232916	226634	1.3	5296.0
Final Consumption Expenditure	\$m	Q305	176222	174591	1.2	5296.0
- General Government	\$m	Q305	41746	41849	0.2	5296.0
- Households	\$m	Q305	134560	132912	1.3	5296.0
Gross Fixed Capital Formation	\$m	Q305	59972	58791	0.2	5296.0
- Private	\$m	Q305	51000	51190	1.2	5296.0
- Public	\$m	Q305	8972	8604	4.3	5296.0
Exports of Goods and Services	\$m	Q305	44732	44544	0.4	5296.0
Imports of Goods and Services	\$m	Q305	49074	48816	0.5	5296.0
Changes in Inventories	\$m	Q305	347	191	76	5296.0
Statistical Discrepancy	\$m	Q305	018	-337	74	5296.0
Expenditure on Gross Domestic Product (GDP)						
Chain Volume Measures, Seasonally adjusted						

Internet

START | Windows Media Player | Shared Picasa | Open Picasa | StatSoft - ABS.org... | Australia - Economic... | Em Haber - Daily We... | 6:02 PM

Asian Development Bank

As previously stated, the ADB is not an on-call database provider. However, two statistical databases provided by the ADB (Statistical Database System and the Poverty Development Indicators Database) are used to create reports. It should be noted that the ADB is in the process of creating a public portal for all available statistical resources within and outside of the ADB. This can be found online at:

<http://www.adb.org/Statistics/default.asp>

The screenshot shows a Microsoft Internet Explorer browser window displaying the ADB Statistics website. The page title is "Database and Development Indicators". The main content area features a large heading "Database and Development Indicators" and a list of key outputs for 2005-2006. A "SPOTLIGHT" box highlights the "KEY INDICATORS 2005" report, which is "NOW ONLINE". A sidebar on the right lists the contents of the database and development indicators, including Key Indicators, Millennium Development Goals, Statistical Tables, Poverty and Development Indicators, International Comparison Program, Environment Statistics, and Technical Assistance. The page also includes a search bar and navigation links for Home, What's New, e-Notification, Site Map, Contact Us, and Help.

Home | What's New | e-Notification | Site Map | Contact Us | Help

Home » Economics and Statistics » Database and Development Indicators

Database and Development Indicators

Information has become a major driving force in economies. For many years, ADB has assisted its developing member countries in gathering and disseminating better statistical data.

The Economics and Research Department disseminates recent key economic, financial, and social indicators compiled from developing member countries and other international sources.

For 2005-2006, key outputs will include the following:

1. Unification of ADB's two statistical databases: the Statistical Database System and the Poverty Development Indicators Database, in order to have one data repository while maintaining the two current data retrieval facilities
2. Development of a portal for all available statistical resources within and outside ADB
3. Development of a household survey data depository
4. Statistical capacity building in developing member countries
5. Investment climate and productivity studies and surveys

[See ongoing and earlier research.](#)

CONTENTS of DATABASE AND DEVELOPMENT INDICATORS

- Key Indicators
- Millennium Development Goals
- Statistical Tables
- Poverty and Development Indicators
- International Comparison Program
- Environment Statistics
- Technical Assistance

Bank for International Settlements

The BIS provides publicly available data and regular publications with statistical annexes on for banking, securities, derivatives, and external debts. The international financial statistics webpage also highlights forthcoming statistical releases and guides to the methodology. The international financial statistics can be found online at:

<http://www.bis.org/statistics/index.htm>

International Financial Statistics

Press releases

- 5 December 2005 BIS Quarterly Review December 2005 - International banking and financial market developments ([read](#))
- 19 October 2005 Preliminary data for BIS international banking statistics released ([read](#))
- 20 May 2005 The Global OTC Derivatives Market at end-December 2004 ([read](#))
- 17 March 2005 Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity 2004 - Final results ([read](#))

Statistics

[Release calendar](#) for all categories of BIS International Financial Statistics

- [Local banking statistics](#)
- [Consolidated banking statistics](#)
- [Securities statistics](#)
- [Derivatives statistics](#)
- [Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity 2004](#)
- [Joint BIS-IMF-OECD-World Bank Statistics on External Debt](#)

Methodology

The BIS consolidated banking statistics: structure, uses and recent enhancements, September 2005 (in the BIS Quarterly Review) ([read](#))

TABLE 19
AMOUNTS OUTSTANDING OF OVER-THE-COUNTER (OTC) DERIVATIVES
BY RISK CATEGORY AND INSTRUMENT
(In billions of US dollars)

Risk Category/Instrument	Notional amounts					Gross market values				
	2003 June	2003 December	2004 June	2004 December	2005 June	2003 June	2003 December	2004 June	2004 December	2005 June
TOTAL CONTRACTS	189,656	197,587	228,958	251,823	270,100	7,896	6,907	6,395	6,243	6,694
Foreign exchange contracts	22,871	24,475	24,997	25,580	28,075	996	1,301	967	1,546	1,541
Overnight forwards and lines swaps	12,332	12,387	13,326	15,242	16,031	470	607	308	643	464
Currency swaps	6,589	6,371	7,833	8,223	8,236	419	507	442	740	549
Options	4,580	5,717	6,838	6,115	6,809	101	136	116	158	129
Interest rate contracts	121,790	141,991	164,626	190,502	204,392	5,459	4,328	3,951	5,457	6,096
Forward rate agreements	10,271	10,709	13,144	12,788	13,073	20	19	20	22	20
Interest rate swaps	94,983	111,209	127,370	160,631	163,749	5,064	3,918	3,962	4,803	6,077
Options	16,546	20,052	23,912	27,082	27,071	434	391	360	432	502
Equity-linked contracts	2,799	3,787	4,521	4,395	5,540	240	274	294	496	717
Forwards and swaps	489	601	691	756	1,176	67	57	63	76	89
Options	2,311	3,186	3,829	3,629	3,968	193	217	231	422	627
Commodity contracts	1,840	1,806	1,270	1,443	1,693	100	128	166	169	271
Gold	304	344	318	369	288	12	39	45	32	24
Other commodities	736	1,502	952	1,074	1,406	88	88	121	137	247
Forwards and swaps	458	420	303	558	738	-	-	-	-	-
Options	279	642	449	516	668	-	-	-	-	-
Other	21,840	25,508	22,644	25,913	27,793	1,881	957	1,116	1,613	1,846
Memorandum item	-	-	-	-	-	-	-	-	-	-
GROSS CREDIT EXPOSURE	-	-	-	-	-	1,750	1,909	1,479	2,070	1,900

World Bank

The World Bank's development data and statistics homepage can be found at:

<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,menuPK:232599~pagePK:64133170~piPK:64133498~theSitePK:239419,00.html>

United Nations

The United Nation's statistic division can be found online at:

<http://unstats.un.org/unsd/default.htm>

Appendix 2

– Minimum Suggested Data Requirements of EWS Models¹

Below is a list of data variables used by the Institute for International Economics in an EWS. This is used to illustrate the depth and variety of data required for EWS, though the greater the variety and frequency of data used, the more useful the models are likely to be:

SELECTED LEADING INDICATORS OF BANKING AND CURRENCY CRISES		
Indicator	Transformation	Data Frequency
Real output	12 month growth rate	Monthly
Equity prices	12 month growth rate	Monthly
International reserves	12 month growth rate	Monthly
Domestic/foreign real interest rate differential	Level	Monthly
Excess real M1 balance	Level	Monthly
M2/international reserves	12 month growth rate	Monthly
Bank Deposits	12 month growth rate	Monthly
M2 multiplier	12 month growth rate	Monthly
Domestic credit/GDP	12 month growth rate	Monthly
Real interest rate on deposits	Level	Monthly
Ratio of lending interest rate to deposit interest rate	Level	Monthly
Real exchange rate	Deviation from trend	Monthly
Exports	12 month growth rate	Monthly
Imports	12 month growth rate	Monthly
Terms of trade	12 month growth rate	Monthly
Moody's sovereign credit ratings	1-month change	Monthly
Institutional investor sovereign credit ratings	Semi-annual change	Semi-annual
General government consumption/GDP	Annual growth rate	Annual
Overall budget deficit/GDP	Level	Annual
Net credit to the public sector/GDP	Level	Annual
Central bank credit to public sector/GDP	Level	Annual
Short-term capital inflows/GDP	Level	Annual
Foreign direct investment/GDP	Level	Annual
Current account imbalance/GDP	Level	Annual
Current account imbalance/Investment	Level	Annual

¹ Institute for International Economics, Accessed 5th December 2005, "Assessing Financial Vulnerability: Chapter 2 – Methodology", www.iie.com.