



Over 60 semi-finalists' posters were displayed at the Dubai Economic Research Award (DERA) Conference, 3 April 2006.

EPRU Director's Message

The EPRU undertakes research on the performance of the UAE economy and as a result relies heavily on data. There are many challenges to be faced when trying to use UAE data which include timely availability, reliability and accuracy. For example, the recent announcement by the International Monetary Fund (IMF) that the UAE economy, measured as nominal (current price) gross domestic product (GDP) grew by a staggering 26.4 per cent in 2005 has taken many analysts by surprise. On the surface this appears to be a tremendous growth rate.

But what exactly does this figure really mean? For the purposes of economic analysis it is *real* GDP (measured in constant prices) rather than nominal GDP (measured in current prices) that matters. How much of this 26.4 per cent nominal GDP growth is explained by price increases (inflation) rather than real output increases? There is considerable anecdotal evidence that the UAE inflation rate could

have been as high as 20 per cent in 2005, and the National Bank of Dubai has estimated it to be at this rate. The IMF itself gives us some idea by indicating that the UAE economy grew in real terms by about eight percent in 2005, meaning the GDP deflator (or inflation rate) was in excess of 18 percent. Eight per cent real GDP growth is impressive, however, what is really important to know is how much has real GDP per capita (per head of population) grown. To answer this question we need accurate and reliable population estimates, and we are still waiting for results from the Population Census that will help answer this question.

This discussion highlights the need for more reliable and available economic statistics more generally. The EPRU believes it has a responsibility to help identify areas for improvement in the collection, collation and analysis of economic data and will do whatever it can to assist with this process.

Dr. Kenneth Wilson, Director - EPRU

EPRU Team

Dr. Kenneth Wilson (Ph.D., University of Wisconsin-Milwaukee), *Professor of Economics & Director, EPRU*, specializes in international trade regulation, country competitiveness, and labor market research.

Dr. Jay Squalli (Ph.D., University of Delaware), *Assistant Professor of Economics & Researcher, EPRU*, specializes in financial market analysis, industrial organization, and applied econometrics.

Dr. Nico Vellinga (Ph.D., Tilburg University), *Researcher, EPRU*, specializes in CGE modeling, economic databases and mathematical economics.

Ms. Sarah Hugo (M.Sc., SOAS, University of London), *Research Assistant, EPRU*, specializes in development economics and economic drivers of growth and competitiveness.

Inside this Issue

Preferential Trade Agreements and their Implications for Customs Services 2

By Dr. Kenneth Wilson

A New Approach to Measuring Trade Openness 3

By Dr. Jay Squalli and Dr. Kenneth Wilson

EPRU News 4

About the EPRU Bulletin

The EPRU Bulletin is a regular publication of the Zayed University Economic & Policy Research Unit and provides rigorous academic and applied analysis of economic issues relating to the UAE and the MENA region, as well as news and events. Paper copies are sent to our mailing list. To join, email epru@zu.ac.ae. An Adobe Acrobat version can also be downloaded from our Web site at: www.zu.ac.ae/epru



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Preferential Trade Agreements and their Implications for Customs Services*



By Dr. Kenneth Wilson,
Professor & Director, EPRU

Background, context and research aims

Over the last decade, debate concerning the advantages of regional or preferential trade agreements (PTAs) has continued apace. Currently the UAE and the USA are negotiating a PTA, though discussions appear to have stalled and a new policy environment exists in the light of the decision by Qatar to walk away from similar negotiations with the USA. In the trade literature, PTA has come to be used in a more generic sense covering any sort of bi-lateral or plurilateral trade arrangement between countries. Previously, a PTA was used to denote a specific form of trade agreement, that being a more narrow sectoral trade arrangement between trading partners. Irrespective, the debate has taken various twists and turns but one emerging theme is the relationship between PTAs and the more contemporary issue of trade facilitation.

As a result of advancements in electronic business and process automation technologies, the potential gains in trade as a result of implementing trade facilitation measures has been recognized as an important driver of trade. At the same time, there has been resurgence in the popularity of PTAs as an important trade instrument. The negotiation of a trade agreements provide an opportunity to formalise trade facilitation initiatives within a broader framework of multiple trade increasing measures. Adding to this are recent developments whereby secure trade and border security imperatives have also been subsumed within the trade facilitation agenda.

Trade facilitation provisions are now a major substantive component, and in some cases, the focal point of bi-lateral, regional and multilateral trade negotiations and agreements. All recent PTAs have included a range of commitments mandating efficiency improvement initiatives such as e-business, e-documentation, electronic document transfer, the automation of

customs clearance procedures, port handling improvements and more sophisticated cargo surveillance (among others). All such measures have clear impacts on the regulatory bodies charged with implementing trade facilitation, namely a country's Customs Service (CS).

Methods Used

In this study we surveyed the important features of all recent PTAs and the literature assessing the trade facilitation impacts of PTAs with a view to identifying specifically their impacts on CSs.

Important results and outcomes

The aim of trade facilitation measures is to bring down the cost of doing business while at the same time ensuring the integrity of border controls. It is fundamentally all about increasing trade volumes by reducing transaction costs while maintaining acceptable levels of risk

The provisions that most directly impact on CSs are, usually, contained within a specific chapter within most recent PTAs dedicated to customs procedures. The objective of such a chapter is to outline broad commitments and undertakings ensuring a speedy clearance of goods, predictable application of the rules and procedures, use of automation, availability of advance rulings, implementation of risk management systems that will all contribute to significant savings for business.

Chapters on custom procedures tend to have, at a minimum, the following provisions:

- an undertaking to use, wherever possible, the transaction value as the basis for the valuation of goods;
- a commitment to give binding advance rulings on the classification of goods and their eligibility for preferential market access;
- an undertaking to release the goods as soon as possible, sometimes within a fixed period and before the final determination of the applicable tariff rate;
- an undertaking to encourage paperless trading, the use of automated systems and to promote the modernisation of business procedures and the adoption of new technologies;
- an undertaking to apply a system of risk management to ensure that bona fide consignments are not held up;
- a commitment to transparency, including the publication on the Internet of any relevant customs procedures;

- an undertaking to establish enquiry points where the other parties to the agreement can easily obtain customs information; and
- agreement to cooperate in the development of improvements to customs procedures.

The inclusion of these understandings and commitments usually require the creation of working groups in order to ensure harmonization among PTA Member countries.

Policy Implications

The research undertaken and summarized here identifies the major factors impacting most heavily on any CS are:

- an increase in trade volumes requiring additional resources and personnel to cope with associated trade flow increases;
- an increase in trade volumes as a result of reduced transaction costs associated with trade facilitation measures also affecting resourcing;
- significant institutional, regulatory and procedural changes required to meet substantive commitments as part of PTA obligations (depending on type of PTA);
- significant procedural and technological adjustments required to meet PTA obligations in relation to streamlining trade; and
- Significant internal capacity building requirements to meet conventional trade facilitation adjustments.

* Details of the research reported here can be found in D. Feaver & K. Wilson, *Preferential Trade Agreements and their Implications for Customs Services*, EPRU Working Paper 05-03.



Members of the EPRU & College of Business Sciences listen to presentations at the DERA Conference, 3 April 2006.

A New Approach to Measuring Trade Openness*

By Dr. Jay Squalli and
Dr. Kenneth Wilson

Background, context and research aims

Trade openness seems to matter. There is compelling theoretical support for the idea that economies that trade more enjoy higher income growth. However, the empirical evidence is less conclusive. We believe that these inconclusive empirical research findings occur because of the inappropriate way in which trade openness tends to be measured. In the hundreds of empirical studies published to date, trade openness, or trade intensity (TI), is popularly measured as total trade divided by income $(X+M)/GDP$. Curiously, irrespective of the data set used, the world's biggest trading countries such as the USA and China are consistently determined to be closed economies using this TI measure. How sensible is it to use a measure of trade openness that determines that the world's largest trading countries are closed from international trade? This paper suggests a new measure of trade openness that more accurately reflects reality. This new measure comprises two important dimensions of trade openness: trade intensity, $(X+M)/GDP$, and the relative importance of an economy to total world trade.

Methods Used

The obvious weakness in using the standard TI measure, or its related alternatives, is that they are one-dimensional measures of trade openness. They look only at the relative position of a country's trade performance compared to its domestic economy. That is, they focus on the question of how large the proportion of a country's income is associated with international trade. The weakness of these measures is their inability to consider another important dimension of trade openness, that being how important is the particular economy to world trade. Put another way, they fail to allow for the relative importance that a country may have to world trade; its openness to total world trade.

We introduce a new measure of relative world trade intensity expressed as:

$$RWTI_i = \frac{(X+M)_i}{\sum_{i=1}^n (X+M)_i}$$

which expresses the proportion of country i 's trade relative to world trade. We combine this measure with the standard TI measure and derive a composite trade intensity measure. The theoretical motivation behind this approach is based on the following four propositions:

Proposition 1: For any given country i with an open economy that trades with at least one country from the rest of the world, the relative world trade intensity measure operates in the range $0 < RWTI_i < 0.5$.

Proposition 2: If Trade Intensity is a function of $RWTI_i$, then this relationship is inverse and can be expressed with the Openness Frontier (OF) curve where OF is downward sloping and convex to the origin.

Proposition 3: For any given levels of country i 's trade, income, and relative world trade, country i cannot have a large TI_i and a large $RWTI_i$.

Proposition 4: A new Composite Trade Intensity measure, CTI_i , can be used as the new measure of trade openness:

$$CTI_i = \frac{n(X+M)_i^2}{GDP_i \sum_{i=1}^n (X+M)_i}$$

Important results and outcomes

We find that the new measure of trade openness, CTI, adjusts the trade openness scores and rankings of all countries. For instance, using data from the World Economic Forum (WEF) for a sample of 117 countries, responsible for 97% of world output, we observe that Australia, China, and the United States improve their ranks from 108th, 63rd, and 115th to 35th, 4th and 7th respectively. Singapore, ranked 1st with the TI measure, drops only to 2nd when using CTI. Other adjustments in rank include Kuwait, Qatar, and the United Arab Emirates which change from 43rd, 50th, and 7th to 48th, 62nd, and 19th respectively. Table 1 provides data for TI and CTI for a sample of 10 countries.

Table 1: Trade Openness Measures (WEF Data, 2004)

Countries	TI	Rank	RWTI	Rank	CTI	Rank
Australia	39.37	108	1.124	23	5178.43	35
Canada	72.06	69	3.318	9	27975.12	11
China	78.50	63	5.987	3	54989.90	4
Estonia	166.78	8	0.086	66	1684.83	56
Kuwait	97.10	43	0.233	52	2642.55	48
Qatar	87.50	50	0.115	63	1178.51	62
Singapore	416.70	1	2.058	14	100352.62	2
UAE	169.80	7	0.752	31	14931.51	19
US	25.20	115	13.672	1	40310.14	7

Policy Implications

Theoretically, trade openness matters. However, the empirical literature testing the trade openness-income hypothesis has been less conclusive. It is our contention that part of the reason for the sometimes contradictory empirical results is the inappropriate method used to measure trade openness, usually measured as TI.

The income growth advantages of trade are also derived by economies that may have low TI measures but trade heavily with the rest of the world. Indeed, our research shows, it is impossible for large trading countries such as the USA to enjoy a high TI measure.

The paper, therefore, argues that to obtain a more accurate measure of trade openness, the relative contribution that a country makes to world trade also needs to be included. The compelling contribution of this paper has been to suggest a new, more complete and more accurate measure of trade openness; a measure that more sensibly represents the degree of true trade openness. By combining both the trade intensity of a given country with its relative share of world trade, we have created a composite trade intensity measure that is better able to classify the degree of trade openness enjoyed by countries. Using CTI, large trading countries such as the USA and China are now classified as open economies alongside those countries such as Singapore and Hong Kong which have traditionally been described as open.

* Details of the research reported here can be found in EPRU Working Paper 06-07 by Jay Squalli and Kenneth Wilson.



Dr. Jay Squalli presents his paper "Are the UAE Financial Markets Efficient?" at the DERA Conference, 3 April 2006.

NEWS

Working Paper Series Launched

In early 2006, the EPRU launched its Working Paper series on the internet. The purpose of the Working Paper series is to disseminate the research outcomes and findings of the EPRU as widely as possible while they are going through peer review. The results described in the Working Papers are preliminary and have not completed the usual review process for journal publications. The views expressed in these papers are those of the authors and do not necessarily reflect the views of Zayed University or the EPRU. We welcome feedback from readers. Comments and suggestions should be communicated directly to the corresponding authors.

Working papers can be accessed at <http://www.zu.ac.ae/epru>

Recent Publications

Working Paper No. 05-01, entitled "Are the UAE Financial Markets Efficient?", by Dr. Jay Squalli (EPRU) has been accepted for publication in *Applied Financial Economics* under the title: "A Nonparametric Assessment of Weak-Form Efficiency in the UAE Financial Markets."

Working Paper No. 05-03, "Preferential Trade Agreements and their Implications for Customs Services", by Dr. Donald Feaver (Queensland University of Technology, Australia) and Dr. Kenneth Wilson (EPRU) has been accepted for publication in the *Journal of World Trade*.

Working Paper No. 05-04, entitled "A Sectoral Efficiency Analysis of the Amman Stock Exchange", by Dr. Mufeed Rawashdeh (American University in Dubai) and Dr. Jay Squalli (EPRU) has been accepted for publication in *Applied Financial Economics Letters*.

PDF copies of these papers can be accessed at <http://www.zu.ac.ae/epru>

Conference Presentations and Papers

Dr. Jay Squalli presented two papers, respectively entitled: "How Competitive are Arab Economies?" and "An Assessment of Weak-Form Efficiency in the UAE Financial Markets" at the Fifth International Conference of the Middle East Economic Association in Sousse, Tunisia on March 10-12, 2006.

Dr. Kenneth Wilson presented an invited paper entitled: "If institutions matter what is the economic benefit of Customs?" at the Conference on Partnership in Customs Academic Research and Development held at the

World Customs Organization Headquarters in Brussels, March 1-2, 2006.

Dr. Jay Squalli presented two papers, respectively entitled: "A New Measure of Trade Openness" and "Issues Advertising and Airline Safety" at the Pennsylvania Economic Association Conference in Indiana, PA on June 1-3, 2006.

Call for Papers

The Middle East Economic Association (MEEA) in association with Zayed University will hold its 6th International Conference on 14 - 16 March 2007 in Dubai, UAE.

The main goal of this conference is to bring together distinguished economists from all over the world for the purpose of exchanging ideas, data, research findings and policy solutions to common problems on a number of interrelated issues such as Trade, Investment, Macroeconomic management, Labor, Growth, Stabilization policies, political economy of policy reforms of relevance to the analysis of the economies of the Middle East and North Africa (MENA) region. It should provide an opportunity for established scholars from different intellectual viewpoints and countries to interact both with each other and with young researchers both inside and outside the region.

To submit an abstract or get information about the conference please visit <http://www.zu.ac.ae/meea>

Computable General Equilibrium Model of the UAE

In February, members of the EPRU attended a week of training on General Algebraic Modeling Systems (GAMS), a Development Environment and Programming language used in Computable General Equilibrium (CGE) modeling. The training was given by Suat Sisik, from EcoMod network, Free University of Brussels and taught the language necessary to construct a model of the UAE economy and simulate economic changes. CGE models are a valuable operational tool for predicting the outcomes of adjustments in economic policy.

Dr. Nico Vellinga, a relatively new addition to the EPRU team, has an extensive academic history in CGE modeling and is currently working full-time on building a dynamic multi-sector CGE model for the UAE economy. The responsible use of an integrated data model framework, such as this, will advance the quality of research conducted by the EPRU on the UAE economy and ultimately help UAE policy makers meet the challenges facing the UAE in the future. Examples of

the applications of the CGE include: macroeconomic stabilization and adjustment; new trade negotiations; trade liberalization; regional integration; management of natural resources; environmental policies and labor market issues, such as how best to achieve Emiratisation. Nico is particularly interested in this final issue, in modeling the UAE labor market within the model, given its significance within UAE policy and to the future shape of the UAE economy.

Dubai Economic Research Awards (DERA)

On the 3rd April members of the EPRU attended the Dubai Economic Research Awards (DERA) conference and awards ceremony at the Madinat Jumeirah Conference Center. DERA was created as a joint initiative of Zayed University and the Dubai Economic Development Department to further economic research of the UAE and to encourage research as a tool to develop economic policy making. Dr. Kenneth Wilson, Director of EPRU was a member of the Steering Committee that oversaw DERA and he also acted as coordinator of the judging panels.

Throughout the day papers were presented to the panel of judges and guests. Jay Squalli, from the EPRU, was a DERA finalist for his paper "Are the UAE Financial Markets Efficient?" The paper tested for weak form efficiency in the Dubai financial market and Abu Dhabi Securities Markets. Jay found there to be weak form inefficiency in most sectors of the two markets and thus concluded his paper by proposing economic policy advice which will enhance efficiency; the "imposition of complete transparency in corporate financial reporting, the development of private and corporate accountability measures, and the adoption and enforcement of international accounting standards and legislation consistent with international financial standards."

The award ceremony in the evening was under the patronage of Shaikh Hamden Bin Rashid Al Maktoum, Deputy Ruler of Dubai and UAE Minister of Finance and Industry and the awards were given by Shaikh Nahyan Bin Mubarak Al Nahyan, the UAE Minister of Education and Scientific Research and President of Zayed University. The top prize was awarded to Dr. Hugo Toledo, from the American University of Sharjah, for his paper on 'An exposition of the problems and prospects of Emiratisation' contemporarily hot-topic within the UAE. ■