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Enlarged ASEAN Free Trade Agreement and Its Impact on China's Regional Trade, Growth and Economic relations

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ABSTRACT

The proliferation of free trade agreements (FTAs) and the emergence of new Asian regionalisms such as the enlarged ASEAN (ie, ASEAN+3 or especially ASEAN+China) and other bilateral, plurilateral and multilateral FTAs in recent years pose challenges and offer opportunities but also require research into these important developments and their underlying fundamental trade-growth causation and impact for member countries. Existing methods (eg, CGE and gravity theory) for this kind of study have their serious restrictions in coverage (eg, dealing in trade of goods only) and data (eg, using cross-section data only). The paper develops a novel and more appropriate comprehensive approach by extending the gravity theory and incorporating economic policy and shocks. It then uses a new flexible modelling method to construct a simultaneous-equation model of trade and growth between the ASEAN, Australia and China. Using data from the World Bank national accounts and ICSEAD regional and international trade over the period 1980-2002, the paper then estimates the model by both standard (OLS and 2SLS) and improved estimation methods to provide superior MSE estimates and forecasts for impact and policy study. Implications of the findings for the ASEAN and its trade with China, for regional economic integration and relations, for trade policy and prospects for trade and welfare improvement for the ASEAN and China will also be discussed.

***Keywords**: New Asian Regionalism, Free Trade Agreement, Economic Integration and Relations, ASEAN, ASEAN+China, Trade and Growth, Gravity Theory, Causality, Economic Modelling, Estimation Methods, Economic and Trade Policy.*

JEL: C32, C51, C52, F02, F14, F15, F42, O11, O41, O53

1 Introduction

The recent emergence of new Asian regionalisms (NARs) and their potential substantial impact requires not only dialogues but also extensive analysis and supporting research. These NARS include AFTA, ASEAN+3 (i.e., 10 ASEAN countries plus China, Korea and Japan), ASEAN+China or ASEAN+1 and other bilateral, plurilateral and multilateral free trade agreements (FTAs) such as Australia-US, Australia-Japan, Australia-Singapore, Japan-Singapore, Korea-Chile, the high-level sought-after ASEAN+5 (ASEAN+3 plus Australia and New Zealand), the currently proposed Australia-Indonesia and Australia-Korea as well as the Cotonou-type regional economic integration agreements (EIAs) advocated by the European Union (EU) in order to promote 'organic' growth and 'normal' opportunities (see Barker, 2002). In addition to the ASEAN+China FTA above, China's other regional trade, growth and economic relations also include the Oceania resulting in the Australia-China trade and economic framework which was signed on 24 October 2003 (DFAT, 2004). In spite of this proliferation of NARs, new and vigorous research into the fundamental issues and impact of trade and growth, integration, and the viability, sustainability or expansion of these important regional developments are still in their infancy on even non-existent.

In the specific case of Australia, its trade with Asia, especially the East Asia 3 (China, Japan and Korea), has been substantial both in volume and in share in the past decades. For example, in 2001, Australia posted 41.1 per cent (or $A50.4 billion) of its total exports ($A122.5 billion) to North Asia and 12.6 per cent to ASEAN. In comparison, the share to the North American FTA (NAFTA) was only 11.2 per cent and to the EU 12.0 per cent (Austrade, 2003). In this context, the emergence of ASEAN+3 and other FTAs or EIAs or FTAs-EIAs, with expected subsequent trade and services diversion, may have a deep impact on Australia's trade, investment, growth and, through less trade in goods and services, regional economic relations and cooperation in non-trade (such as security and stability) areas. To date however, only limited work in this area has been done and reported on the causal and quantitative significance of the factors giving rise to NARs, and their potential impact in general (see ASEAN, 2002, and also Tran Van Hoa, 2003) or with specific reference to Asia-Australia trade. The case of the ASEAN+3 and its potential and specific impact on ASEAN-Australia-China trade in particular has not been investigated or reported. The paper is focused on this bilateral trade issue which is also the objective of our current joint project.

It should be noted that while an apparent reason for the emergence of the FTAs and EIAs mentioned above in the Asian region may be the member countries' proximity (distance, size and area), other economic (for example, the 'flying geese' pattern and other external and internal crises and, to a lesser extent in the case of China, the economic and financial crisis that started on 2 July 1997 in Thailand) and non-economic (for example, social, cultural and religious) factors may regionally and globally also play an important and interdependent part (see below). It would be more appropriate in this case to investigate the impact of NARs (for example, ASEAN+3) on our trilateral focus, Australia-China trade and growth, primarily from this new and comprehensive perspective.

Methodologically, the paper departs from the existing standard, but restrictive, CGE/GTAP method (which deals statically and only with trade in goods in its coverage and essentially uses no econometrics or historical time-series data) and proposes instead a new approach with data-based quantitative and substantive policy outcomes to empirically validating recent Asian FTAs' *raison d'etre,* and to investigating their potential impact on trading partners' trade more comprehensively (that is, in goods, as well as in services and investment). The new approach has four new innovative features. First, it proposes to extend the standard gravity theory [for the foundation of this theory, see for example Linneman (1966), Harrison (1996), Frankel and Romer (1999)]. to construct appropriate simultaneous-equation trade-growth models in flexible functional form (Tran Van Hoa, 1992a) for our three trading blocs of interest, namely, ASEAN, China and Australia and their relationships. Second, it uses recent World Bank World Tables national accounts and France's CHELEM or ICSEAD trade time-series data, and improved 2SHI estimation methodologies (Tran Van Hoa, 1985, 1986b, 1986c, 1997, and Tran Van Hoa and Chaturvedi, 1997, and Namba, 2000 and 2001) to fit these models to provide more reliable empirical evidence on trade-growth causality and historical support (or a lack of it) for the ASEAN, China, Australia, and their trade linkages. Third, based on these findings, trade and growth policy implications for these three trading blocs will be discussed and the impact of ASEAN+3 on Australia-China trade assessed. Finally, applications of our new modelling and impact study approach to, for example, ASEAN+5, ASEAN+India or the recently proposed Australia-China, Australia-Indonesia, Australia-Korea and other regional, plurilateral or multilateral FTAs and EIAs will be briefly suggested.

2 Emergence of New Asian Regionalisms and ASEAN+3

The ASEAN+3 proposal, sometimes known as the Young-Ho Kim proposal named after Korea's former Minister of Commerce who strongly supported and put it forward, was discussed in the mid- and especially late-1990s by ASEAN leaders, and implemented notably through the Hanoi Plan of Action in 1998 for ASEAN Vision 2020 (ASEAN, 2002). A number of factors can be attributed to its recent emergence. First, it was the result of decades of fast growth and a number of economic, financial and restructuring developments in North East Asia and in other major trading blocs in the world. Second, it was the result of developments and shifts in focus in North America and the EU in the aftermath of the damaging Asia crisis starting in Thailand in July 1997, and its subsequent contagion to a number of 'once miracle' economies in East and South East Asia, the former USSR, and, to a lesser extent, North and South America and the EU (Tran Van Hoa, 2000a). Third, it was the result of a benign neglect from such international organisations as the International Monetary Fund (IMF) or the economic power of North America and the EU on the plight of crisis countries in Asia, and the of lack of interest of the former in seriously helping to solve the economic, financial and social problems arising from the Asia crisis (Tran Van Hoa, 2002d).

In 2001, and early in 2002, other new developments in East and South East Asia gained prominence and assisted in giving rise to a number of new Asian economic integrations or regionalisms and Asian FTAs. These developments included the quick recovery and recurring growth in Korea, the emergence of China as a fast post-Asia crisis growing economy, and the continuing stagnant state of the world's second largest economy (namely Japan). The recent recovery and growth of Korea has also been put forward by some authors as a leader in the post-crisis ‘flying geese’ theory for ASEAN+3 economies (see Harvie and Lee, 2002).

The NARs and FTAs including customs unions and EIAs (which are accepted exceptions, subject to strict conditions, to the WTO principle of the Most Favoured Nations under Article XXIV of GATT and Article V of GATS) are indeed numerous and proliferating at an amazing speed at the behest of government leaders especially in the Asian region. They include plurilateral and bilateral FTAs such as first ASEAN, ASEAN+3, then ASEAN+5, ASEAN+5+Taiwan, Japan+Singapore, Japan+Korea, Japan+Mexico, Korea+Mexico+Chile, Singapore+New Zealand, China+Japan+Korea, Hong Kong+New Zealand, Australia-Japan (NARA), Australia-Singapore, and last, but not the least, Vietnam+US. Currently there is even a discussion on the setting up of a North Asian FTA in which Japan will play an important part. In mid-2003, a protocol was also being negotiated between Washington and Canberra to address key US complaints about the Australian market and to prepare for the setting up of a sweeping US-Australia FTA, as proposed by the Australian government (Hartcher, 2002), to the dismay of New Zealand which wanted, on the other hand, a trilateral US-CER (Close Economic Relations – an EIA - between Australia and New Zealand). The USAFTA was signed in January 2004 but at the time of writing it was still to be ratified by both the US Congress and Australia’s Senate amid strong protests by various sectors of the economy in Australia. In mid-2002, there was a suggestion by New Zealand Prime Minister Helen Clark to set up Australia-New Zealand Economic Cooperation (ANZEC) to boost the low-activity 21-year old CER. An Australia-Thailand CER Agreement – the first between Thailand and a developed country – was also proposed in mid-2003 and finally signed in November 2003 (DFAT, 2004). The EU has also been strongly advocating regional integration and liberalisation for the Pacific nations to create EU-type transnational economic partnerships (an EIA) within the Cotonou framework, to stimulate trade and create growth among them (Barker, 2002).

The main focus and objective of the NARs and Asian FTAs (as separate from currency or customs unions and EIAs) are to promote trade and living standard either among the Asian economies themselves or with the membership of other economies outside Asia such as the US, Mexico and Chile in the Americas, and Australia and New Zealand in Oceania. Prominent among these NARs and Asian FTAs is the ASEAN+3 proposal above and, part of it, the ASEAN+1 or ASEAN+China FTA with a 1,700 million people market, a US$2 trillion GDP, and trade worth US$1.2 trillion. ASEAN+China was endorsed by the 10 leaders of ASEAN in Brunei in November 2001, and its details were worked out at a negotiating meeting in Beijing in May 2002. As mentioned earlier, the impact of this ASEAN+1 or ASEAN+China on Australia-China trade and growth is the focus of our present study.

3 ASEAN+3, Other FTAs and Gravity Theory

Since the primary objectives of FTAs are trade liberalisation and welfare improvement, as well as economic partnerships generally, for member countries, the FTA premises that directly trade (international and domestic) and indirectly other determinants of trade significantly and causally affect: economic welfare (see Raimondos-Moller and Woodland, 2002); real wages (see Ruffin and Jones, 2003);

growth (for developed countries see Frankel and Rose, 1998, Frankel and Romer, 1999); and development (for developing countries, see Harrison (for all countries), 1996, Frankel et. al., (for 10 East and South East Asian countries), 1996, and Tran Van Hoa (for ASEAN, China, Korea and Japan), 2002a). The outcomes also are mutually beneficial in many other non-economic aspects (e.g. closer regional and international cooperation and collaboration, social harmony, political stability and prosperity), and, in the context of globalisation and enhancing international competitiveness, conducive to regional or international economic integration (ASEAN, 1999).

In view of the expectation that FTAs will enhance trade and produce final outcomes of higher growth and higher real wages or better economic development improvement for trading partners or FTA member countries, a useful causality concept in the form of a gravity theory using geographical, demographic and other common or concurrent attributes (see for example Linneman, 1966 and the specification in Table 3 in Frankel et. al., 1996) to explain trade flows (liberalisation) between countries may be appropriate in empirical studies of this trade-growth nexus (for another more restrictive justification, see Rose, 2000). Some extensions to this theory's determinants using OECD country data have also been attempted to deal with trade correlations and output fluctuations (see for example, Otto et. al., 2002). The data used in these important studies of the gravity theory have been singularly cross-sectional and therefore unable to deal with recent temporal developments in the Asian or other non-Asian regions.

In the case of Asian economies, or especially the member countries in the ASEAN+3 FTA, and their impact in a trilateral ASEAN-Australia-China trade context, not much research both of a qualitative or quantitative kind has been done or reported on the validity of the required premises underlying the foundation of this ASEAN+3 FTA (namely, given their regional proximity but diverse culture, history, religion and development components, does more trade cause higher growth in the member countries and over time?) and its trade linkage to ASEAN-Australia-China's exports and imports of goods and services and investment.

4 A Trade-Growth Model for Studying the Impact of ASEAN+China FTA on ASEAN, Australia and China Trade and Growth

Consider, for convenience and without loss of generality, a simple model of two simultaneous implicit functions (extension to more functions is straightforward when more variables are considered and endogenised) comprising and extending the basics of the standard cross-section-data-based gravity theory linking trade and growth between two trading countries or blocs. This extended gravity theory comprises not only the standard gravity theory's geographic or demographic attributes (for ASEAN, China, and Australia) but also, significantly, economic factors, and the requirements or protocol conditions of a regional FTA or EIA. Since the geographical attributes (such as distance and area) in the ASEAN+China and Australia-China regions are *a priori* assumed to be a rationale for setting up ASEAN and ASEAN+1 or ASEAN+3, we can then focus on other relevant demographic (e.g, population as a proxy for size – see Frankel and Romer, 1999), economic and non-economic determinants of trade and growth in our model.

In this model, trade (named T) may be defined as exports or imports or openness (exports plus imports) or broader coverage and scope (including services and investment and ODA) and may include domestic trade (Frankel and Romer, 1999), and growth (Y) may be defined as GNP or, by more popular convention, GDP. The two countries may be comprehensively all possible pairs of the 13 ASEAN+3 members and Australia or, more specifically and within the interest of our present study, as pair-wise (bilateral) combinations of ASEAN-Australia, ASEAN-China and Australia-China. Thus

$$F1\ (\alpha, Y, T) = 0 \qquad (1)$$
$$F2\ (\beta, T, Y, X, W) = 0 \qquad (2)$$

where F1 and F2 are two arbitrary functionals linking trade and growth and their theoretically plausible determinants, α and β are parameter vectors, X and W denote, respectively, other economic (fiscal, monetary, trade and industry policy – see Sala-i-Martin, 1991) and non-economic (e.g, distance, area, size, policy shifts and external shocks – see Johansen, 1982) variables, relevant to a country or a group of countries' growth or development. Importantly for our study, in addition to T and Y, data for X and W must be available and consistent with published time-series data in a standard Kuznets-type accounting framework (e.g, SNA93), or the accounting system of Stone (1988), or the recent World Bank World Tables.

Taking the total differentials of (1) and (2), and neglecting terms of second and higher–order (see for example Allen, 1960, and Tran Van Hoa, 1992a), the 2-equation model (1)-(2) can be written in stochastic form and in terms of the rates of change (Y%, T%, X% and W%) of all the included econometrically exogenous and endogenous variables (Y, T, X and W) as:

$$Y\% = \alpha 1 + \alpha 2T\% + u1 \qquad (3)$$
$$T\% = \beta 1 + \beta 2Y\% + \beta 3X\% + \beta 4W\% + u2 \qquad (4)$$

In (3)-(4), the equations are linear and interdependent in the sense of Marshall or Haavelmo, α's and β's are the elasticities, and u's other unknown factors outside the model (Frankel and Romer, 1999) or the disturbances with standard statistical properties. In (3)-(4) circular and instantaneous causality in the sense of Granger (1969) or Engle-Granger (1987) exists or is regarded as a testable hypothesis. In their non-stochastic forms (in which all disturbances are idealistically zero), these equations form the basic structure of the applied or computable general equilibrium (CGE/GTAP) models of the Johansen class, in which all elasticities are usually assumed to be given or known *a priori* and the impact of endogenous or endogenised variables (say T) on Y is dependent on the exogenous variables and calculated system-wise using such iterative procedures as the Gauss-Euler algorithm with a known sparse matrix of elasticities.

It can be verified that our so-called flexible (or function-free) trade-output growth equation (3) in the model above is econometrically identified in the sense of mathematical consistency. An impact study of endogenous trade (or exogenous X and W) on growth can be analysed directly via its 2SLS (or reduced-form adjusted) form structurally given in (5) below or indirectly via its reduced form given in (6) in terms of all the exogenous economic and non-economic variables in the model. It is well-known in the theory of econometrics that the use of OLS to estimate equation (3) for example will, in this case, produce biased parameter estimates. These two equations can be written as

$$Y\% = a1 + a2\, \check{T}\% + v1 \qquad (5)$$
$$Y\% = p1 + p2X\% + p3W\% + v2 \qquad (6)$$

where Ť is T as estimated by the OLS of its reduced form equation (that is (6) with T% replacing Y%) and v's the new disturbances with standard statistical properties.

An important feature of our modelling approach is that, contrary to the CGE/GTAP restrictive (goods only) and *a priori* (i.e., the values for elasticities are assumed or subjectively or dogmatically given) approach, our impact study is data-consistent as all required elasticities are estimated from the model and from available data and have asymptotically and statistically desirable and consistent properties (an important issue in the gravity theory's empirical applications – see Frankel and Romer, 1999) when suitable estimation and forecasting methods (eg, 2SLS or other instrumental variables (IV) methods) are employed. Another important feature is that, contrary to other SNA93-based or Keynesian system-wide approaches, our impact study has the general flexibility in modelling specification rationale and implementation in assuming explicitly no *a priori* functional forms for the equations in the model, and it can handle data on trade or budget deficits and real rates of interest when inflation exceeds the nominal interest rate. The usual method of routine log transformations for all variables in an econometric model cannot do this.

To implement the model, equations (3)-(4), above to empirically investigate the causal relationship between, for example, trade and growth in the ASEAN, China and Australia, we can use, given fixed geographical components (distance and area) as discussed, and, for time-series data, population (a proxy for size), conventional economic determinants of trade (see for example Frankel and Rose, 1998, Frankel and Romer, 1999, and Rose, 2000, and Otto et. al., 2002) and/or other relevant factors (e.g, external or internal shocks – Johansen, 1982) when such data are available. One such extended model relevant to our focus of study on the possible causality (impact) between Australia trade and the ASEAN or China economies may be written in either the reduced-form adjusted equation (7), and supplemented by the full reduced-form equation for T (8) (and similarly for growth Y) as

$$Y\% = a1 + a2\, \check{T}\% + a3ST + v1 \qquad (7)$$
$$\begin{aligned} T\% = p1 &+ p2\ YT\% + p3\ FT\% + p4\ MT + p5\ PT + p6ERT \\ &+ p7IT + p8POT + p9ST + v2 \qquad (8) \end{aligned}$$

In equations (7)-(8), Australia trade (T%) with its Asian trading partner (ASEAN or China or both) for example is assumed to cause, together with crises or shocks (ST), Australian growth (Y%) but this trade is also affected by economic activities, trade-related policies and external or internal shocks in Australia and its trading partner (either ASEAN or China or both). Assuming for convenience that Australian trade (traditionally defined as its exports (or imports, see Barro and Helpman, 1991)) with its trading partner is affected by this partner's GDP and other major economic activities, trade-related policies (see Coe and Helpman, 1993 for this approach) or external or internal shocks in its trading partner, then Equation (8) in its reduced form simply assumes that Australia's partner's trade is simply affected by the exogenous factors such as GDP (named YT), inflation (PT) – see Romer (1993), fiscal policy (FT), monetary policy (MT), trade policy and exchange rates (ERT) – see Rose (2000), industry structure (IT) – see Otto et. al. (2002), population (POT) – see Frankel and Romer (1999), and internal or external shocks (ST) – see Johansen (1982) - of its trading partner. Equation (8) is in fact a derived demand equation for tradable goods (or even transacted services and investment) reflecting essentially its supply and demand components postulated in standard microeconomic and trade theory.

In deriving equations (7) and (8) for 2 trading countries or blocs above, we assume that Country 1's trade affecting its growth is a testable hypothesis and this trade itself is essentially a demand equation for either imports (from Country 2) and exports (to Country 2) or vice versa or both. For the economies of the ASEAN and China, geographic attributes (that is, being in the neighbouring region) are assumed to be the *prime facie* reason for setting up the ASEAN+3, and the distance and area characteristics are omitted and proxied by population size as all of our variables are expressed in terms of time-series (distance and area may also not be appropriate even for cross-section studies with high-trade countries like Singapore and Brunei in ASEAN+3). All variables in the model, that is, Y, T, YT, FT, MT, PT, ERT, IT and POT are expressed as their rates of change so the units of measurement (i.e., $billion or $million, ratios or index numbers) for the trading countries' variables are irrelevant. ST is a qualitative time-series variable representing internal or external shocks having either one-off effects or temporally permanent effects (autoregressive and non-stationary) on trade and growth with discrete values.

The implications of our model above are important for studying the transmission mechanism or relationship between trade and growth of the ASEAN, China and Australia, and their trade linkages. This relationship, if empirically substantiated, can provide powerful evidence on the trade, investment and welfare enhancement relationship premises of these countries as trading partners, and, as a result, it would lend crucial support for the viability, sustainability and promising prospects of the new Asian regionalism, namely, ASEAN+3 (or other FTAs), as well as providing empirical evidence for quantifying its impact on Australia-China trade and suggesting robust and credible trade policy.

5 New Advances in Estimation, Forecasting and Impact Study Methodologies

The importance of using a suitable estimation method for our model (or similar models) to get more accurate or unbiased results has been emphasised in previous trade-growth studies using standard gravity theory (see for example Frankel and Romer, 1999). These studies deal mainly with the OLS and IV (instrumental-variables) estimation methods. In this section, we briefly survey the various new and improved estimation and forecasting methods that are available, and their appropriate use can produce more accurate econometric outcomes on the trade-growth causal relationship and subsequently on economic and trade policies and regional integration.

More specifically, in our model, the equations in differential and reduced form as given in equation (8) for Y% [or, similarly, for T% to provide $\check{T}$% in equation (7)] can be written more generally with a sampling size T and k independent variables (possible causal components) in matrix notation as:

$$\underset{(Tx1)}{y} = \underset{(Txk)}{Z} \underset{(kx1)}{ß} + \underset{(Tx1)}{u} \qquad (9)$$

where y = Y%, Z = the rate of changes of the exogenous and predetermined variables (both static and dynamic), ß = the parameters, and u the disturbance satisfying all standard statistical assumptions.

We now define our evaluation criterion (in terms of average MSE or Wald risks) for an arbitrary estimator $\hat{\beta}a$ for β in equation (9) as Wald risk ≡ MSE($\hat{\beta}a$) = ($\hat{\beta}a$-β)'W($\hat{\beta}a$-β) where W is a positive definite. Under Wald risks, we can estimate equation (9), which is essentially a general linear model for structural or behavioural analysis or for direct forecasting and policy studies (see Pindyck and Rubinfeld, 1998), by using the OLS or, at a more statistically efficient level, any of the explicit (Baranchik, 1973) Stein or Stein-rule methods as described below.

More specifically, using equation (9), the basic and most well-known and used method to produce estimates and forecasts of y (or Y%) is the OLS estimator of ß (denoted by $\hat{\beta}$) and written as

$$\hat{\beta} = (Z'Z)^{-1}Z'y \qquad (10)$$

A more efficient method is the explicit Stein estimator of ß (Baranchik, 1973) and given by

$$\hat{\beta}s = [1 - c(y-Zb)'(y-Zb)/b'Z'Zb]\ \hat{\beta}$$

$$= [1 - c(1-R^2)/R^2]\ \hat{\beta} \qquad (11)$$

where c is a characterising scalar and defined in the range $0 < c < 2(k-2)/(T-k+2)$, and R^2 is the square of the sample multiple correlation coefficient.

A still more efficient method (to avoid, in one respect, implausible results derived from plausible OLS parameter estimates) is the explicit positive-part Stein estimator of ß (Anderson, 1984). This estimator is defined as

$$\hat{\beta}+s = [1 - \min\{1\ ,\ c(y-Z\hat{\beta})'(y-Z\hat{\beta})/\hat{\beta}'Z'Z\hat{\beta}\}]\ \hat{\beta}$$

$$= [1 - \min\{1\ ,\ c(1-R^2)/R^2\}]\ \hat{\beta} \qquad (12)$$

A new method to obtain estimates and forecasts of ß in equation (9) with better properties in Wald risks has been proposed (see Tran Van Hoa, 1985, Tran Van Hoa and Chaturvedi, 1988, 1990, 1997). It is in a class of explicit improved Stein-rule or empirical Bayes (also known as the two-stage hierarchical information or 2SHI estimators for linear regression models). This estimator includes the explicit Stein and the double k-class (Ullah and Ullah, 1978) estimators as subsets (Tran Van Hoa, 1993a). Other applications of the Stein, Stein-rule, and 2SHI estimators to linear regression models with non-spherical disturbances and to Zellner's seemingly unrelated regression model have also been made (see Tran Van Hoa et al, 1993, in the case of regressions with non-spherical disturbances, and Tran Van Hoa, 1992b, 1992c, and 1992d, in the case of seemingly unrelated regressions).

The explicit 2SHI estimator is a *bona fide* or fully operational (in statistical theory terminology) estimator and defined as

$$\hat{\beta}h = [1 - c(1-R^2)/R^2\} - c(1-R^2)/\{R^2(1+c(1-R^2)/R^2)\}]\ \hat{\beta} \qquad (13)$$

and its positive-part counterpart (Tran Van Hoa, 1986a) is given by

$$\hat{\beta}+h = [1 - \min\{1\ ,\ c(1-R^2)/R^2\} -\ \{1/((R^2/c(1-R^2)) + 1)\}]\ \hat{\beta} \qquad (14)$$

While all the estimators given above can be applied to the general linear model equation (9) for structural and forecasting analysis, their relative performance in terms of historical, *ex post* or *ex ante* (Pindyck and Rubinfeld, 1998), forecasting MSE can differ. Thus, it is well-known that, in MSE and for $k \geq 3$ and $T \geq k + 2$, $\hat{\beta}$s dominates (that is, it performs better in forecasting MSE) $\hat{\beta}$, and $\hat{\beta}$s is dominated by $\hat{\beta}$+s (Baranchik, 1973, Anderson, 1984). However, it has also been demonstrated (Tran Van Hoa, 1985, Tran Van Hoa and Chaturvedi, 1988) that, in MSE, $\hat{\beta}$h dominates both $\hat{\beta}$ and $\hat{\beta}$s, and more importantly, $\hat{\beta}$+h dominates $\hat{\beta}$+s (Tran Van Hoa, 1986a).

A further important result of the 2SHI theory has recently been proved (see Tran Van Hoa and Chaturvedi, 1997): *the dominance of the 2SHI over the OLS and Stein exists anywhere in the range $0 < c < 2(k-1)/(T-k)$*. This indicates that the 2SHI produces better (in terms of smaller Walk risk or generalized Pitman nearness) estimates and forecasts even if the estimating and forecasting equation has only one independent variable in it. *The condition for the optimal Stein dominance in the linear equation up to now requires that $0 < c < 2(k-2)/(T-k+2)$* (see Anderson, 1984). Further MSE-dominance properties of the 2SHI estimators and their extensions over the positive-part Stein estimator in regression equations have been given by Namba (2000, 2001).

Remarks

First, since one of the best known IV estimators, namely the 2SLS, has been demonstrated to be dominated in MSE by the 2SHI in errors-in-variables models and in identified structural equations of simultaneous-equation models (see Tran Van Hoa, 1986b and 1986c) such as equation (7), the so-called IV (see Frankel and Romer, 1999) impact of the trading partner's (say ASEAN) trade on Australia growth can be directly studied via the application of the 2SHI to equation (7).

Second, while some application of the 2SHI forecasting methods to predictions of economic activities in some developed countries such as Australia (see Tran Van Hoa, 1992d) has been made, these methods have not been investigated explicitly within an open trade-growth theoretical framework and an empirical context using more recent economic data for the major economies in ASEAN and the Asia 3. This issue is taken up in the study below for some of the fastest growth economies or group of economies in the world in recent years (even after the Asia crisis of 1997), but with highly fluctuating investment and being very sensitive to foreign trade and capital flows in the region (see Tran Van Hoa and Harvie, 1998).

Third, an interesting feature of our study is that the 2SHI estimators are finite-sample estimators (which converge to the OLS or 2SLS when $T \rightarrow \infty$) with optimal MSE properties (see above). Since all time-series data used here are necessarily annual and have, as usual, a small sample size, the study outcomes are therefore finite-sample optimal.

Finally, it has been demonstrated that the 2SHI dominates other conventional estimators when measurement errors exist (Tran Van Hoa, 1986b). Since the poor quality of economic data from the Asian countries and other less developed countries economies is well known, one by-product of our study is that the findings are also optimal in errors-in-variables cases.

6 Econometric Evidence on ASEAN+China-Australia Trade and Growth

This section reports substantive results for a number of trade-growth simultaneous-equation models which are based on several plausible extensions to the standard gravity theory: such as planar approximation to any arbitrary functionals (see below), to time-series data, and incorporating micro/macroeconomic factors and external and internal shocks, and given in equations (7) and (8) above. For comparison with the findings of previous studies in standard gravity theory applications, these results are obtained by the OLS, 2SLS and 2SHI for the structural equation of growth, equation (7).

Data – Due to the limitation of the required data in our studies, especially dealing with developing economies, all original data are obtained as annual and then transformed to their ratios (when appropriate). The ratio variables include trade (exports and imports), government budget, and money supply (M2) all divided by GDP, and unemployment rates. Other non-ratio variables include exchange rates in relation to the US dollar, population and binary variables representing the occurrence of the economic, financial and other major crises over the period 1981 to 2002. All non-binary variables are then converted to their percentage rate of changes. The use of this percentage measurement is a main feature of our modelling and impact approach and avoids the problem of *a priori* known functional forms (see above) and also of logarithmic transformations for negative data [such as budget (fiscal) or current account deficits]. As the average micro/macroeconomic data for the countries in the ASEAN are difficult (if not impossible) to measure, we have reversed the direction of trade below in a ‘dual – ASEAN trade to China or, equivalently, China trade to ASEAN’ context and also used Australia as the trading partner of ASEAN and China instead.

The data for regional (e.g, ASEAN) and national (e.g, Australia and China) trade (exports (X) to and imports (IM) from, respectively), GDP and estimated mean population (named POP) are retrieved from ICSEAD’s 2003 regional trade databases. Openness between 2 trading countries is defined as T=X+IM although the separate effects of either X or IM have been experimented with (see below). All trade and economic data are at current prices in US dollars. Fiscal, monetary, trade and industry policy data for Australia was obtained from the 2003 OECD database and approximated, respectively, by government budget/GDP (BY), M2/GDP (M2Y), interest rates ®, exchange rates per US dollars (XR), and unemployment rate (UR). In addition to the usual demographic and economic components in our model, we also identified (due to ICSEAD data unavailability before 1980) 4 major world crises that had affected the ASEAN and Asia 3 economies (and other economies) during our sampling period and included them as 4 dummy variables with persistent effects after their occurrence (one-off effects were postulated but discarded as implausible in the study). These are the stock market crash of 1987 (C87), the China turmoil (C89), the Gulf War of 1991 (C91), and the Asia crisis of 1997 (C97). The outbreaks of SARS in 2003 and the avian flu early in 2004 have been omitted due to lack of sufficient data. Various modelling experiments in our study also show that these crises all have an econometrically permanent or non-decayed effect (reflecting autoregressiveness or non-stationarity) on growth in ASEAN and China.

The Estimated Models - The various bilateral trade-growth models for the ASEAN, China trading with Australia are based on these data. The 2-simultaneous equation trade-growth model China and Australia in our studies, for example, that is based on equations (7)-(8), can be written fully using *mnemonic notation* for estimation and impact analysis as:

$$\begin{aligned} \text{YCN\%} = \alpha_1 \quad & + \alpha_2\text{TOZ2CNY\%} + \alpha_3\text{C75} + \alpha_4\text{C87} \\ & + \alpha_5\text{C91} + \alpha_6\text{C97} + \text{v1} \qquad (15) \\ \text{TOZ2CN\%} = \beta_1 & + \beta_{12}\text{YOZ\%} + \beta_3\text{BY\%} + \beta_4\text{M2Y\%} + \beta_5\text{R\%} \\ & + \beta_6\text{IPD\%} + \beta_7\text{XR\%} + \beta_8\text{UR\%} + \beta_9\text{POP\%} + \beta_{10}\text{C75} \\ & + \beta_{11}\text{C87} + \beta_{12}\text{C91} + \beta_{13}\text{C97} + \text{v2} \qquad (16) \end{aligned}$$

where, in percentages, YCN = China's GDP, TOZ2CNY = Australia's total trade (exports + imports or openness) with China divided by China's GDP, and YOZ = Australia's GDP. The variables BY, M2Y, R, IPD, XR, UR and POP denote, respectively, fiscal, monetary, interest rates, inflation, exchange rate, industry policy and population in Australia. The v's are the disturbances representing other unknown factors but with effects on YCN and TOZ2CN respectively (see Frankel and Romer, 1999 for this rationale). The trade-growth models for the ASEAN and Australia or ASEAN and China can be similarly constructed.

Substantive Findings – Two sets of empirical findings for 2 trade-growth models and based on equations (15)-(16) above for China-Australia, Australia-China and China-ASEAN, and are given in Table 1. This trio of models provides information on the causality direction of trade-growth activities for three trading blocs under study. Due to the importance of the estimation methods used that can provide greatly different results even for the same model (see further detail in Frankel and Romer, 1999) and also for the purpose of statistical efficiency comparison, three types of estimated structural parameters have been calculated for each model. These are the OLS, the 2SLS and the 2SHI (applied on the 2SLS). For testing the hypothesis, the 2SHI has approximately the same asymptotic properties as OLS and 2SLS.

Table 1

Impact of China, Australia and ASEAN Trade on Australia and China Growth
Extended Gravity Theory in Flexible Structural Form
1981 to 2002

	China from Australia			Australia from China			China from ASEAN		
Variables	OLS	2SLS	2SHI	OLS	2SLS	2SHI	OLS	2SLS	2SHI
Constant	11.46**	11.38**	9.34**	8.55**	6.56**	5.40**	11.79**	11.65**	9.27**
Openness/GDP	0.015	0.019	0.016	0.07*	0.16@	0.13@	0.001	0.01	0.01
Stock Crash 87	-0.27	-0.11	-0.09	6.32**	10.18**	8.37**	-0.87	-0.75	-0.59
China Turmoil 89	-7.34**	-7.46**	-6.12**	-5.91**	-8.00**	-6.58**	-6.87**	-6.86**	-5.46**
Gulf War 91	7.70**	7.73**	6.34**	-5.27**	-6.24**	-5.13**	7.59**	7.53**	6.00**
Asia Crisis 97	-3.82**	-3.82**	-3.13**	1.15	1.56	1.29	-3.85**	-3.69**	-2.94**
R^2	0.73	0.73	0.85#	0.73	0.77	0.86#	0.72	0.71	0.88
F	7.47**	7.48**	7.57**	10.81**	7.58**	8.70**	6.62**	6.55**	6.45**
DW	2.17	2.17	0.87&	1.48	1.26	0.81&	2.16	2.17	0.78&

Sources of data: World Bank (2003) as compiled by Australia's 2003 DX database. ICSEAD Trade Data (2003).

Notes: ** significant at the 5% level, * significant at the 10% level @ significant at the 15% level. # correlation coefficient between actual Australia growth and its 2SHI estimate. & DW calculated using the formula DW=2(1-ρ). Tests on 2SHI estimates are based on their asymptotic properties as T -> ∞.

From the results given in Table 1, we note four important findings. First, while having high success in modelling output growth has been internationally accepted as difficult, all three estimated models of growth vis-à-vis trade in the ASEAN, Australia and China have statistically significant and higher modelling performance (that is, R^2 reaching up to 88 per cent) relative to other trade-growth causality models as reported in previous international studies. As R^2 is an average number for the whole sample size used in estimation, it may not be able to give a detailed period-by-period success of the estimated models. A graph of the observed and estimated growth fluctuations in the China-Australia, Australia-China and China-ASEAN models for the period (1983-2002) under study would give a better measurement of modelling success. The graphs for these growth data and their forecasts have also been done (not reported here) and the results indicate that the peaks, troughs and turning points of the growth observations are accurately predicted for almost all of the period under study. Second, when we look at the dynamic features of the estimated models using either plots or standard diagnostic tests, all estimated models also appear free from serious autocorrelation-induced inefficiency problems.

Third, trade, as defined by total trade/GDP between China, Australia and the ASEAN, has uniformly acceptable results for all models. With the China-Australia model, China trade (as a ratio of China GDP) with Australia has a positive (in the range 0.015 to 0.019) but insignificant impact (even at the 15% level used especially to deal with a small sample sizes for example) on China growth in terms of the OLS, 2SLS and 2SHI. For the Australia-China model, China trade with Australia, as similarly defined, has a positive (in the range 0.07 to 0.16)) and weakly (at the 10% and 15% level) significant impact on Australia growth. For the China-ASEAN model, ASEAN trade with China also has a smaller and positive (0.001 to 0.01) effect on China growth but this effect is not statistically significant. Fourth, for all three models under study, the impact of the stock market crash of 1987, the China internal turmoil in 1989 and the 1997 Asia economic and financial crisis, all have a uniformly and statistically significant and strong negative impact on Australia and China growth over the period 1983 to 2002. Surprisingly, the Gulf War in 1991 reveals a large, beneficial (up to 7.73 in size) and significant impact of China trade with the ASEAN and Australia on China growth. This war has however a significant and damaging effect (in the range –513 to –6.24) on Australia growth.

7 Implications for Trade Policy and Economic Relations for 3 Trading Blocs: Australia, China and the ASEAN

While the models we used for study above may be simple in their structure, they contain the main and conventional ingredients of and analysis on trade and growth and their relationships for countries under study. They are also fairly consistent with similar previous studies for comparative purposes. The empirical findings reported in the preceding section also provide a number of interesting results on trade-growth causation and with important international trade or co-operation policy implications for Australia, and with China and the economies of the ASEAN in particular or with other regional and international economic integrations with similar interest and objectives in general. Some of these new trade initiatives include as we mentioned earlier the Australia-Indonesia and Australia-Korea FTAs or the currently ministerially mooted Australia-Mexico (for South America), Australia-Emirates and Australia Kuwait (for the Middle East or West Asia) FTAs (ABC, 2004). Some of our findings may be useful in providing significant evidence and information for trade-growth analysis, discussions and policy consideration. In addition, while some of the previous trade-growth analysis is based purely on cross-section data or a mix of panel data (see earlier citations and also PC, 2002), our studies are based completely on time-series data due to our interest in recent economic development in the Asian region and its potential impact on Australia in the timeframe stipulated in the various signed and proposed FTA's. These two approaches of gravity analysis are however complementary to some extent.

Does China Trade with Australia and the ASEAN Cause China and Australia Growth?

Trade-to-growth is an important causal topic in economics that has attracted some of the best minds in the field over the last ten years or so (see for example Frankel and Romer, 1999, for a survey), and the conclusions have not been finalised for all cases. Our empirical results above show that in the specific case of China vis-a-vis its trading partners in the Asia Pacific and Oceanic regions, namely the ASEAN and Australia, its trade, when defined as its relative size of openness to the ASEAN and Australia, has only a weak empirical support as a significant and beneficial determinant of China growth.

Does China Trade with Australia and the ASEAN Cause China and Australia Growth Differently and Who gains Most?

It should be noted that, based on the findings given in Table 1 above, China appears to have gained twice as much from its trade with Australia than from its trade with the ASEAN. This would have important implications in trade and economic relation priority setting for government and corporate trade policy makers in China and Australia as well as the ASEAN. One consideration here is whether China trade with

Australia, a relatively advanced Western country in the region, will bring about more benefits than with other countries in South East Asia. Interestingly from a bilateral perspective, our findings also show that Australia seems to had gained nearly 10 times more from its trade with China than China had gained from trade with Australia from the period under study. The evidence appears to support empirically the current proposal by the Australian government to develop further the country trade and economic cooperation with China via a formal FTA framework even though the motives for this proposal may have been different from political or other non-economic aspects.

Impact of ASEAN+China FTA on China Development, Growth and Regional Trade Policy

The above findings also indicate a consideration of paramount political impact: the gains from the ASEAN+China FTA and their relative importance to other FTAs in the region and perhaps beyond. These gains as we have discussed are small compared to China gains from trade with Australia or possibly with other developed countries in Asia or outside Asia. Does this mean that the ASEAN are not important and should be treated as such by China policy makers. We think that not. The fairly negligible gains from the ASEAN at present can be regarded as an incentive for more trade and growth improvement. In addition, the geographical affinity, the historical and cultural links, and the huge market and resource (energy supplies) bases of the ASEAN to China are important factors in ASEAN-China trade, economic and political alliances.

Do Crises Affect China and Australia Growth?

When openness is used as a proxy for trade between China, Australia and the ASEAN, the recent crises such as the stock market crash of 1987, the China internal turmoil of 1989 and the 1997 Asia meltdown all do appear to negatively affect China growth. However, the 1987 and 1997 crises seem beneficial to the Australian economy. Since the 1989 China crisis has been regarded as essentially a domestic problem for China, the finding that it also had impact on Australia growth is a new piece of evidence on the underestimation of China's domestic issue that have in fact affected its international trading partners' welfare and development. On the other hand, it is interesting to note from our findings that while the Gulf war was essentially a Western and Australia problem with severe damaging impact on the Gulf war allies' economies, this war was external to China and the China economy had, in our study, in fact benefited from it. The finding that Australia had, even though only weakly, benefited from the 1997 Asia crisis would support the nonchalant view of 'The Asia crisis. What crisis?' in some sections (for example, the Melbourne Institute) of the Australian economic community (see Tran Van Hoa, 2000b).

Another derivative conclusion from our findings is that a contemporary trade-growth model for China, the ASEAN, Australia (or even for other regions or countries) studies, without the inclusion of these recent shock factors (as implied by Frankel and Romer, 1999 but not dealt with in standard gravity theory or CGE/GTAP impact evaluation studies, or as stipulated by Johansen for policy analysis, 1982), may have serious and biased results on the causation and subsequent policies being explored and formulated for governments and national and international trade agencies.

Are Trade-Growth Causation Results Affected by Estimation Methodologies?

In previous studies of trade-growth, OLS results of trade-growth models based on the gravity or similar theory seem to indicate an underestimation of the trade effect. IV (eg, 2SLS) estimates of the trade effect are usually found to be larger in general than OLS estimates. This is also supported strongly in our present studies: the underestimation by the OLS in relation to the 2SLS can be over twice for all three trade-growth models. Four reasons have been put forward to explain the underestimation of the OLS and two explanations for the overestimation of the 2SLS (see Frankel and Romer, 1999, for a brief survey). In our studies using openness, the underestimation of the OLS is found for all bilateral trade models for the three trading blocs, namely, China, Australia and the ASEAN.

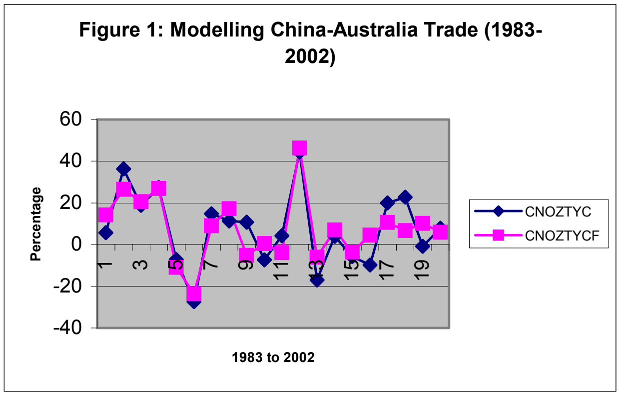
It is well known from the bias $-\beta Cov(Vu)$ of the OLS in the standard errors-in-variables models (that is, $y=\beta X^*+u$, but X^* is unobserved and proxied by observed X with $X=X^*+V$, where V is measurement errors) or, equivalently, in simultaneous-equation econometric models, that the specification of the model or the instruments (as captured through $Cov(Xu)$) solely determines a downward or upward bias of the OLS. In our view, it is the nature of the model and the characteristics of the instruments and collected data that empirically determine the estimation bias. A general conclusion for a model may not be made in this case.

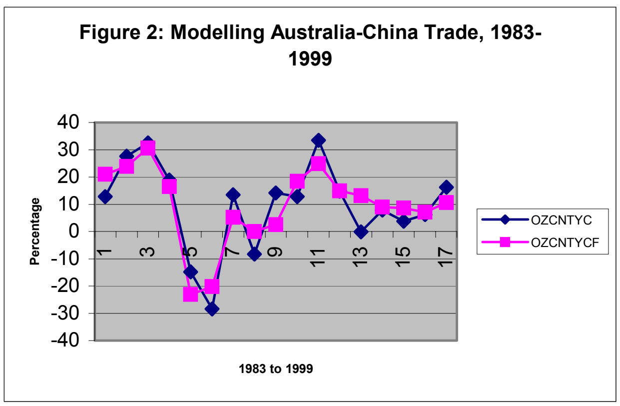
When we take into account new advances in the estimation and forecasting theory in econometrics and its sister, statistics, and when we are focused on higher efficiency for the estimates of the models that are subject to misspecification (e.g, omitted relevant variables) or measurement errors or simultaneity bias, then the 2SHI estimates should, as has been demonstrated earlier, be used. In this case the impact based on the OLS and 2SLS is underestimated and seriously so in some models. In addition, historical and ex post forecasts and impact derived from the OLS and 2SLS will be seriously biased and suboptimal.

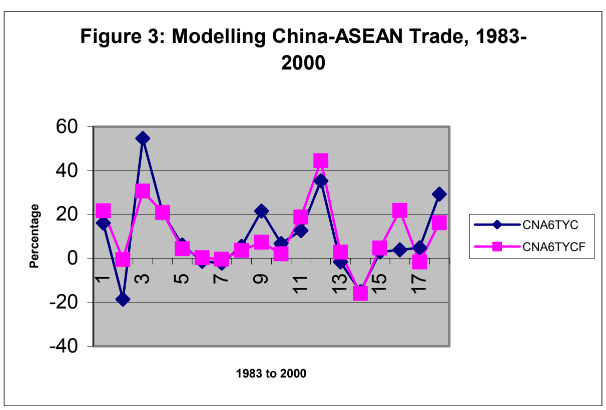
Are Reduced-form Estimates of Trade a Good Proxy for Trade in our Models?

This is a question on the accuracy and reliability of the trade-growth model and the instruments used (a point often raised in the literature, see Frankel and Romer, 1999). The answer in this case has to be relative, as different models will have different instruments and therefore different accuracy or reliability outcomes. To answer this question for our models, we have calculated the proxy for T, namely $\check{T}$, from its reduced form for each of the estimations requiring a knowledge of $\check{T}$. Standard evaluation criteria such as the correlation coefficient, the RMSE, and the Theil-MSE-decomposition Um (bias), Us (variation) and Uc (covariance) where, by definition, $Um + Us + Uc = 1$, are then used to evaluate the proxy performance of $\check{T}$ as compared to its actual T in each model reported in Table 1. The results of this evaluation are given in Table 2.

The graphs of actual trade flows between China, Australia and the ASEAN and their estimates from our trade-growth models have been plotted (see Figures 1-3). From these graphs, we first note that, as in the earlier studies using our new modelling flexible (that is, multi-equation and function-free extended gravity theory) approach, the Ť very accurately emulates all troughs, peaks and turning points of the actual T in all three models – China-







Australia, Australia-China and China-ASEAN. Second, the excellent modelling success here should also be assessed in the context of modelling the rates of changes of major economic variables or activities, a notoriously difficult task according to researchers in this field. Third, the T proxy results indicate that, according to the evaluation criteria reported in Table 2, the Ť seems to be a very good estimated proxy to T in all models. This finding would enhance the robustness of our estimation (by the OLS, 2SLS or 2SHI) of the impact of Australia-China trade on Australia and China growth and related recommendations on trade policy or economic relations.

Table 2
Reliability of Trade Proxy in
China-Australia, Australia-China and China-ASEAN Trade-Growth Models
Openness (Exports+Imports)/GDP
1981 to 2002

Model	China from Australia (1983-2002)	Australia from China (1983-1999)	China from ASEAN (1983-2000)
Correlation Coefficient	0.87	0.89	0.81
RMSE	8.55	7.03	10.15
Mean Error	0.00	0.00	0.00
Um	0.00	0.00	0.00
Uc	0.07	0.06	0.11
Us	0.93	0.94	0.89

Notes. Ub+Us+Uc = 1. See Pindyck and Rubinfeld (1998) for further detail on these evaluation criteria. The estimates are based on TSP calculation.

Do We Have Empirical Support for the proposed bilateral Australia-China FTA Proposal by Australia?

After the successful negotiations and signing of the Australia-Singapore FTA and the Australia-Thailand in 2003, and the US-Australia FTA early in 2004, the Australian government has proposed official dialogues and negotiations with a view to set up further bilateral FTAs for countries in the region (eg, Australia-China, Australia-Indonesia and Australia-Korea) and beyond (eg, Australia-Mexico for South America, and Australia-Emirates and Australia-Kuwait for the Middle East or West Asia). In fact, an Australia-China trade and economic framework was agreed in May 2002 to enhance bilateral trade and investment and the official signed on 24 October 2003 (DFAT, 2004). Coupled with the slow progress of the Doha agreements on WTO agendas, the subsequent dismal outcomes from the WTO Seattle and Cancun Ministerial Meetings and arising concerns from the new Singapore Issues, these bilateral FTA proposals were seen as natural developments within a 'big picture' (WTO and GATS) framework and logical extensions of the current new Asian regionalism resulting in the proliferation of the FTAs in many forms and guises bespecially in the Asian and Oceanic regions.

As we have mentioned earlier the objectives of setting up an FTA are, in addition to better regional cooperation and political stability and security, to enhance trade between its country members and to improve their growth, development and ultimately welfare. These objectives necessarily require the validity of the premise that trade does in fact directly and positively affect growth in these FTAs. What are the determinants of trade and how they affect growth and development provide only auxiliary information on the interaction of the various activities in the trading member countries, and to provide a more accurate measurement of the impact of enhanced trade generated. Our findings reported above lend ample support to the hypothesis that trade between the three regional blocs, China, Australia and the ASEAN provides only a beneficial (that is, positive) but weak (statistically and in magnitude) contribution to China and Australia growth. The implications are, based on our present findings and historical data over the past 20 years or so, that an Australia-China FTA would therefore serve more a regional political cooperation agenda because of the rapid rise of the Chinese economy in world economic and political power, its geographical gravity or closeness than a genuine economic and trade objective of mutual benefits. Further research would need to be carried out on this issue, including the decomposition of trade into exports and imports and taking into account significant structural breaks in these economies and other relevant factors over the period under study.

Implications for Australia-China Trade Policy

The above conclusions appear to indicate that China trade with Australia, and especially crises, are important factors for Australia growth and China development. More specifically, the gains from China trade to Australia are more beneficial to Australia growth in a national context than the gains from Australia trade to China development. Since Australia is known to be more advanced and competitive, in terms of development stages, advanced technology, and other aspects of comparative advantages, than China, our findings on Australian growth being dependent more on China trade seem to be an interesting consideration in both countries for further study in Australia-China, China-Australia and even China-ASEAN trade policy analysis. A good trade or integration policy emanating from China towards Australia, or vice versa, should take this into account.

Implications for Australia and China Growth and Regional Cooperation

In our earlier study (Tran Van Hoa, 2002a) it was pointed out that while trade between the Asia 3 or ASEAN members and other trading blocs (e.g, NAFTA and EU) reflects an important historical trend in the past 30 years or so, the composition of trade by tradable commodities is also important in promoting growth and development. Since the majority of trade between the Asia 3 or ASEAN and other advanced economies in North America and the EU involve groups of tradable commodities of a hi-tech nature, it was claimed that this technology transfer is essential to growth and development in the Asia 3 or ASEAN.

The implications of this for our present study are threefold. First, while showing an interest in improving trade with China even though this trade impact may be less beneficial to China, the proposed Australia-China FTA for example can still cultivate this regional trade and economic cooperation as useful for technology transfer from a developed country (that is, Australia) with a Western cultural background in the region to China. Second, a closer economic cooperation between China and Australia may have an extra economic benefit in a global context when the major trading blocs such as NAFTA (the US and Canada) and the EU are seemingly heading more towards regional self-interest or even economic isolationism. Third, with the current swelling dissatisfaction with globalisation supported vehemently mainly by US transnational corporations which were beset at the same time with corporate corruption and accounting scandals and even with the prediction of the end of globalism by some analysts, bilateral or regional FTAs and CERs may avoid to some extent these problems and pitfalls of globalisation. Finally, an FTA or a closer Australia-China relation would put the member countries in a closer framework to promote trade and growth (DFAT, 2004) and to deal better with crises such as the economic and financial turmoil or terrorist attacks that, on recent experience, have wrought havoc on the 'once miracle' economies in the region in the form of economic slow-down and deep recession, political and social unrest, welfare deterioration, and regional instability. These problems and developments have also affected Australia but to a lesser extent.

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