Social and Economic Studies 56:1&2 (2007): 135-181 ISSN: 0037-7651

TOWARDS A SINGLE REGIONAL CURRENCY IN THE CARIBBEAN AND PACIFIC REGIONS

T.K. JAYARAMAN*

ABSTRACT

Economic integration in Europe has inspired many initiatives in other regions as well. One of the earliest attempts to imitate the European monetary union was the initiative announced in 1992 by the member countries of the Caribbean Community (CARICOM) for forming a single market and economy. Despite progress since then in many areas including harmonization of tax and various other policies and setting formal regional institutions including a Supreme Court, a common currency is still far off. On the other hand, the Pacific Islands under the banner of their regional organization known as the Pacific Islands Forum gave concrete shape only very recently, in late 2003, to integration efforts by agreeing to promote freer trade by 2010. The objective of the paper is to review the Caribbean experiences, which are of relevance to the Pacific region. In tracing recent progress in CARICOM, the paper focuses on the stability of most exchange rates, in terms of US dollar values, which has suggested to some observers that the US dollar should be adopted as the common currency, an idea, which parallels the Australian suggestion for the Pacific region. Future directions towards which the two regions can move for reaching the objective of a single economic space are indicated.

Regional economic integration of island nations in the Caribbean and the Pacific regions has been a subject of great interest for several decades. The reasons were obvious: small-sized economies could not go it alone, as they would not be able to realize economies of scale in manufacturing and shipping lines operations and running universities. The arguments, though valid in the 1970s, were not any way persuasive enough for most of the young island nations in the Pacific, as they did not have any notable manufacturing capabilities then or even today, nor was there any

* The author is grateful to Dr. DeLisle Worrell, a former Deputy Governor, Central Bank of Barbados, now with the Monetary and Financial Systems Department in the International Monetary Fund, and University of the West Indies for reviewing earlier versions of the paper and his comments and suggestions.

immediate demand then for shipping services, as there were no products to be exchanged between island nations, nor any big demand for tertiary education. For these reasons, the Pacific island countries (PICs) were far behind their counterparts in the Caribbean region in integrating their economies.

Unlike the Caribbean initiatives, which had set the goal of single market and economy for the region as far back as the 1970s, PICs did not consider integration beyond trade amongst themselves. The intergovernmental efforts symbolized by the two umbrella regional organizations, the Caribbean Community and Common Market (CARICOM) and the Pacific Islands Forum (the Forum) have been similar. These include servicing regional governments; coordinating regional approaches in areas of common economic interest; overseeing areas of functional cooperation and acting as the focal points for a range of associated institutions. However, notably absent from the list of objectives of the Forum, as Fairbairn and Worrell (1996) observed in their comparative study on the South Pacific Caribbean island economies, were the issues of a single market and a common currency.

The idea of a common currency for the Pacific region is of recent origin. It was floated by Australia at the Annual Forum Leaders' meeting held in Auckland in August 2003 but was not formally discussed. The reception to the suggestion of a single currency amongst the PICs was cool. The reasons were apparent. The subject of regional integration in the Pacific never came to be defined in the past, let alone pursued with any vigour. Since adoption of a common currency involves abdication of monetary sovereignty, PICs were reluctant to discuss it. Sensing the hostility towards the idea of a common currency, the Forum prepared in 2004 a draft Pacific Plan spelling out clear goals, termed as four pillars: (i) economic growth; (ii) sustainable development; (iii) good governance; and (iv) security. The Pacific Plan, which was finalized by December 2005, discusses economic cooperation. Though the idea of a single currency for the Pacific region seems to have been shelved for the time being, it will eventually emerge as an issue for consideration now that free trade amongst PICs and closer cooperation with the two advanced member countries would become a reality by 2010 and 2015 respectively.

Viewed against this background, this paper seeks to examine the case for a single currency in the Pacific by comparing with and drawing upon the experiences of the Caribbean. The remainder of the paper is organized into five sections. The first section presents a comparative picture of integration efforts in the two regions; the second section deals with the pre-conditions required for a single currency in the Pacific region, while the third section assesses the progress achieved in the Caribbean towards the emergence of a single market economy (SME) and the case for a single currency in the Pacific; the fourth Section deals with the way ahead in the two regions; and the fifth Section presents a summary with conclusions and their policy implications.

Regional Integration Effects: A Comparative Picture

There are many commonalities among the CARICOM countries and PICs. Selected key indicators of countries in the two regions are presented in Table 1. Fairbairn and Worrell (1996) note that the sland nations in these two regions do not command the range of nformation and skills needed for success in production for the nternational market, as domestic markets are very small. Even the iest endowed have strengths in some areas and weaknesses in ithers. Noting that the requisite skills reside with government as vell as the private sector, the two authors stressed the need for iooling human resources so as to make available a wider range of kills, achieve synergies from the interaction of individuals within ach profession, and attract and retain highly skilled personnel for vhom a single country might not afford sufficient challenge or cope (Fairbairn and Worrell 1996: 95).

Early Initiatives in the Caribbean

The first initiative towards regional integration was taken by the Caribbean nations when they set up a Caribbean Free Trade Area CARIFTA) as far back as 1968. This was followed by a more definitive action when they signed the Treaty of Chaguaramas TOC) in 1973 for establishing a Caribbean Community and Common Market (CARICOM). A secretariat was also set up. All of 5 Caribbean countries, except the Dominican Republic, are iembers, the former having a free trade arrangement with ARICOM.

Table 1: Selected Key Indicators of Pacific Island Countries

	Population ('000)	Per Capita GDP (Current Prices) in US$ 2003	Human Dev Index Ranking	Aid per capita US$ 2002	Aid % of GDP 2002	Average Growth Rate (%) 1990–2003
Caribbean Region						
Antigua and Barbuda	76	10,449	55	192.1	1.90	3.2
Bahamas	314	15,797	51	NA	NA	0.4
Barbados	270	9,423	29	12.8	0.10	0.4
Belize	256	3,382	99	88.6	2.60	6.7
Dominica	79	3,438	95	381.7	12.10	1.4
Dominican Republic	8745	2,514	98	18.2	0.70	4.7
Grenada	80	4,060	93	117.5	2.30	3.6
Guyana	765	937	104	84.9	9.00	3.3
Haiti	8132	415	153	8.9	4.50	-0.4
Jamaica	2651	3,008	79	9.2	0.30	1.0
St.Kitts and Nevis	42	7,745	39	683.8	8.00	3.7
St.Lucia	1419	4,124	71	226.5	5.10	1.7
St.Vincent and the Grenadines	120	4,060	87	40.1	1.30	3.2
Suriname	436	2,199	67	26.9	1.20	2.1
Trinidad and Tobago	1303	7,384	54	5.6	0.10	2.9
The Pacific						
Cook Islands	19	2,651	62	490.9	28.00	3.3
Fiji	799	2,281	81	41	1.80	1.6
Fed States of Micronesia	114	1,864	120	702	37.40	1.8
Kiribati	85	530	129	203.3	18.60	2.9
Papua New Guinea	5,099	523	133	36.4	7..2	3.2

Table 1: Selected Key Indicators of Pacific Island Countries (contd)

	Population ('000)	Per Capita GDP (Current Prices) in US$ 2003	Human Dev Index Ranking	Aid per capita US$ 2002	Aid % of GDP 2002	Average Growth Rate (%) 1990–2003
The Pacific						
Republic of Marshall Islands	51	2,008	121	823.3	49.60	2.3
Samoa	175	1,484	117	214.2	14.50	0.5
Solomon Islands	418	541	124	56.8	11.00	0.1
Tonga	98	1,347	63	217.2	16.40	2.5
Tuvalu	11	345	118	254	45	3.8
Vanuatu	183	1,138	129	133	11.7	2.1

Notes: 1. Population and per capita GDP figures for the Caribbean are for 2003
2. Population and per capita GDP figures for the Indian Ocean and the Pacific regions are for 2001
3. Human Development Index for 2002

Source: ADB (2004), IMF (2004b), UNESCAP (2004)

The TOC proved an inadequate mechanism for responding to various global developments, including intense competition among the rest of the world in regard to access to larger markets as well as free movement of capital. Emergence of mega-trading blocs and free trade areas in other regions underlined the need for a CARICOM Single Market and Economy (CSME). The TOC was amended in 1989 with nine new protocols. The CSME is designed to pool resources for improving competition, mainly geared towards minimizing problems of small states and structural deficiencies with the target date set as January 1, 2006. In addition to ensuring it is WTO-compliant, CSME is being prepared to be a platform for entering into the Free Trade Area of the Americas (FTAA) as well as for testing the waters for more regional markets.

Five Pillars of CSME

The CSME, which is to be developed as a single economic space through the removal of all restrictions is based on five pillars signifying (i) free movement of capital; (ii) free movement of goods, services and people; (iii) common trade and commercial policy; (iv) harmonization of economic, fiscal and monetary policies; and (v) common currency (CARICOM 2005). One of the most significant steps is to provide an institutional and legal framework by establishing the Caribbean Court of Justice (CCJ) for the region as a whole, with a view to ensuring an environment of economic stability and legal certainty in the CSME. In its original jurisdiction, the CCJ will interpret and apply the Revised TOC. The Board of the Caribbean Development Bank has been authorized by the Heads of States to raise US$96 million, intended to be disbursed to a Trust Fund that will finance the budget of the Court out of its earned income.

Progress as of 2004 towards establishing the CSME by January 2006 is shown in Table 2. Notable events, aside from creation of CCJ, include enacting the TOC into domestic law by 12 members of CARICOM; setting up national standards bodies; gradual removal of unauthorized import duties and non-tariff barriers; removal of restrictions to provision of services and mobility of skilled labour; introduction of CARICOM passports by member countries; accreditation of institutions; agreement on transference of security benefits; free movement and integration of capital markets;

Table 2: Status of Key Elements of CSME

Elements	Status
1. **Treaty of Chaguaramas (Revised)**	Of the 12 CARICOM Countries, who signed the Treaty Barbados, Belize, Jamaica, St. Lucia, St. Vincent & the Grenadines have not only ratified it but also enacted the Treaty into domestic law.
2. **National Administration**	All 12 member countries have arrangements (identification of a Ministry/Agency for implementation of requirements.
3. **Enforcement, Regulation and Supporting Institutions**	Agreement has been signed and necessary legislation enacted for setting up the creation of Caribbean Court of Justice. Agreement has been for establishing CARICOM Regional Organisation for Standards and Quality (CROSQ). National Standards Bureaus are established in 11 member states. National Competition Bodies have been established in Barbados, Jamaica and St. Vincent and the Grenadines.
4. **Free Movement of Goods**	Task Force was established to review the existing non-tariff barriers against intra-regional trade. A schedule for removal of unauthorized non-tariff barriers has been prepared. Discriminatory taxes and charges have been identified on a number of goods of CARICOM origin.
5. **Free Movement of Services**	Schedules of Commitments for removal of Restrictions by Member States have been prepared for phased removal by 31 Dec 2006. Programmes for restrictions on international maritime and air transportation would be negotiated.
6. **Free Movement of Persons**	CARICOM Passport will be issued by all member countries. Core Elements for a CARICOM Entry/Departure form have been agreed to. Two sets of lines at ports of entry will be introduced: one for CARICOM nationals and another for non-CARICOM nationals.

Table 2: Status of Key Elements of CSME (cont'd)

Elements	Status
7. Mechanism for Equivalency and Accreditation	Establishment of National and Regional Accreditation Infrastructure has been agreed to.
8. Agreement on Transference for Social Security Benefits	Agreement entered into force on 1 April 1997.
9. Free Movement of Capital	Schedules of Commitments for removal of Restrictions have been approved.
10. Capital Market Integration	Regional Stock Exchange has to be established. Caribbean Credit Rating agency has been established in Trinidad & Tobago.
11. Intra-regional Double Taxation Agreement	11 Member Countries have signed and ratified.
12. Harmonization of Laws	Draft 20 Modules of model custom legislation have been reviewed. Model Competition Law has been prepared. Model Consumer Protection Law has been prepared. Model Financial Institutions Law has been prepared.

Source: www.caricom.org accessed on June 15, 2005

harmonization of laws; signing of intra-regional double taxation agreements; common external policies and sectoral programmes and common support services. As for the introduction of a common currency, it was agreed to have a set of convergence criteria similar to the ones put forward by the Maastricht Treaty in Europe.

It should be noted that almost all initiatives came from the Caribbean nations. In a way, all innovations were homegrown, although there were supportive studies by international bodies and by academics. This is because CARICOM membership is open only to the Caribbean nations and no major powers outside the region have had any say. Thus, the sense of ownership of reforms by the member countries of the CARICOM has been a great strength in terms of legitimacy in pushing the integration idea thus far.

The Pacific Efforts

When some PICs became independent in the 1970s, unlike in the Caribbean the erstwhile colonial masters took the lead. Australia and New Zealand made the first move by founding the South Pacific Bureau of Economic Cooperation in 1971, now known as the Pacific Islands Forum (the Forum). Table 3 presents in brief, the milestones of the long journey towards economic integration. Fry (2005) divides the 34-year old history on regional cooperation and integration into more or less five distinct phases, with some

Table 3: History of Regional Economic Integration Efforts in the Pacific

Years/Period	Events
1947	Establishment of South Pacific Commission (SPC) by six countries Australia, France, New Zealand, Netherlands, the United Kingdom and the United States, SPC was providing technical, consultative and advisory assistance in social, cultural and economic activities In 1998, with the inclusion of the Micronesian countries and northern Pacific States, which were former US Trust Territories, the name was changed to Pacific Community. The acronym SPC is still retained and it stands for Secretariat of Pacific Community. There are 27 members. The programmes of SPC consist of three sectors: land resources, marine resources and socio-economic sectors. The functions are provision of technical assistance, education and training and information/communication. SPC is located in Noumea, New Caledonia.
1968	The University of the South Pacific was established to provide higher education and training that reflects the aspirations and needs of the Pacific islands. The main campus is in Suva, Fiji, and there are two campuses in Samoa, which hosts the School of Tropical Agriculture and in Vanuatu, which hosts the Law Unit and Language Unit. There are University Extension centres in other island states.
1971	Establishment of South Pacific Islands Forum by seven founding members (Australia, Cook Islands, Fiji, Nauru, New Zealand, Tonga, and Samoa). Expanded later to include all 16 States, covering the Northern Pacific region. The name was changed to Pacific Islands Forum (PIF). It is popularly referred to as the Forum, which serves as the premier regional policy-making body of the self-governing states. The Secretariat is known as the Forum Secretariat and its objective is to service the Heads of Government meeting, to foster and promote regional economic cooperation, particularly on political, economic and trade issues.

Table 3: History of Regional Economic Integration Efforts in the Pacific (cont'd)

Years/Period	Events
1972	Establishment of the South Pacific Applied Geo-Science Commission (SOPAC). Started as a UN Project for mineral prospecting in offshore areas, it assists member countries in identifying, assessing, and developing mineral and non-living resource potential of extensive marine resources.
1974	Establishment of South Pacific Regional Environment Programme (SPREP) which aims to provide assistance to the member states in the areas of protecting and improving the environment and ensuring sustainable development for the present and future generations.
1977	The Pacific Forum Line was founded for regional cooperation in shipping. It is a private company wholly owned by nine members of the Forum. The share holding members are: Cook Islands, Fiji, Kiribati, Nauru, New Zealand, Papua, New Guinea, Solomon Islands, Tonga and Samoa."
1979	Establishment of the Forum Fisheries Agency (FFA) which provides technical assistance in the development of fisheries management policies and in negotiations on the issue of licenses. Collection of fees, and surveillance of zones; collecting and dissemination of information on prices; shipping, processing and marketing of fish and fish products; focusing on management procedures legislation, and agreements within and outside the region. FFA is based in Honiara, the Solomon Islands. Establishment of South Pacific Trade Commission (SPTC) in Sydney to promote trade and development and encourage. Australian investment in island countries, through joint ventures, the SPTC holds exhibitions.
1980	Establishment of Pacific Island Development Program (PIDP) in Honolulu under the East West Center. Membership covers all island countries regardless of political status. PIDP conducts research on topics identified by Pacific island leaders.
1980–1989	Period of Collective Diplomacy. Successful Negotiations with European Community on Lomé Conventions. Negotiations on Law of the Sea. Anti-nuclear dumping campaign against Japan's proposal to dump radioactive waste in the Marianas Trench, demonstrating collective action. Anti-drift netting campaign against Japan and other environmental initiatives. Institutionalisation of understandings:

Table 3: History of Regional Economic Integration Efforts in the Pacific (cont'd)

Years/Period	Events
	South Pacific Nuclear Free Zone Treaty (1985). The Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (1986). The Convention for the Prohibition of Fishing with long driftnets in the South Pacific (1989).
1990–1999	Period of Harmonisation of Policies. Structural Reforms. Policy Dialogues. Donor-Led Reform Programmes Funded by Asian Development Bank. Melanesian Spearhead Group Trade Agreement between four Melanesian countries: Fiji, Papua New Guinea, Solomon Islands and Vanuatu for freer trade.
2000–	Pacific Island Countries Trade Agreement (2002) for free trade among the Pacific Island Countries by 2010. Pacific Agreement on Closer Economic Cooperation (2002) for forging greater cooperation and negotiations by Pacific island countries with Australia and New Zealand to start in 2011. Preparation of Working Draft on Pacific Plan by Task Force for review and approval by Pacific island Leaders in December 2005.

Source: Fairbairn and Worrell (1996)
Fry (2005)

overlapping. They cover the following: (i) 1971-1975: comprehensive regional integration; (ii) 1975-1980: sectoral integration; (iii) 1981-1985: regional security; (iv) 1985-1990: collective diplomacy; (v) 1991-2000: harmonization of national policies; and (vi): 2001 and onwards to the present: new regionalism.

Finding that the goal of comprehensive regional integration in the immediate years was too ambitious, the Forum turned to sectoral integration in the second half of the 1970s. The setting up of the University of the Pacific in Fiji and creation of Air Pacific with shares held by PICs were some important achievements. However, there was some disillusionment with Air Pacific. Noting that it was Fiji, which had gained more from the common airlines, the other PICs namely Nauru, Samoa, the Solomon Islands, Tonga and Vanuatu while retaining shares in Air Pacific, set up their own national airlines over the next ten years to promote tourist arrivals direct from Australia, New Zealand and USA.

A Practical Approach

Sectoral integration was soon replaced by a more practical approach of collective diplomacy in many "soft areas of cooperation", where conflicts were less likely. The Lomé negotiations with the European Community in the 1980s, the Law of the Sea Negotiations and environmental protection arguments at the Rio Conference were some outstanding examples of success.

In the 1990s, the Melanesian countries (Fiji, Papua New Guinea [PNG], Solomon Islands and Vanuatu) forged a trading bloc under the Melanesian Spearhead Group (MSG) Trade Agreement free trade in select goods. Under MSG trade, Fiji and PNG built up trade surpluses with Solomon Islands and Vanuatu, with the result that the latter suspended free trade in early 2002 and re-imposed trade restrictions on imports from Fiji and PNG.

On a wider level, this period also witnessed efforts towards harmonization of national policies. Acceptance of the Washington Consensus in regard to fiscal and monetary restraints, financial sector liberalization and public sector reforms paved the way for Australia and New Zealand to tie them into their bilateral assistance programmes.

New Concerns

The disappointment with slow progress of structural reforms in PICs led Australia and New Zealand to reconsider their approaches. The 9/11 event of 2001 imposed new responsibilities on Australia to make the Pacific safer from terrorism. Additionally, ethnic strife in the Solomon Islands in the late 1990s and the overthrow of an elected government in 2000 in Fiji caused fresh concerns to Australia and New Zealand. Taking the cue from a study by Hughes (2003), which described some PICs as "failed states", an Australian Senate Committee (the Committee) on Australia's Relations with Pacific island States concluded that a *Pacific Economic and Political Community*, on the lines of the European Union should be a consideration in the medium-long term future of the region (Australian Senate Committee 2003). The Committee, devoting attention to adopting a common currency for promoting fiscal and monetary discipline, observed: "If PNG and PICs see benefit to their economies and their overall economic development by adopting the Australian dollar or using the

potential for an integrated region as an incentive to reform and address the necessary structural and other issues, the Australian Government should not discourage this" (Australian Senate Committee 2003: 79).

In the meanwhile, globalization has already thrown up some new challenges: the phased discontinuance of preferential treatment by European Union (EU) for PICs' products, including sugar and fish, required them to re-structure their export industries for competing with the rest of the world for access to EU markets. Further, having found themselves unable to attract foreign direct investment, they wanted to come together and offer an assured regional market of 7 million people. Necessitated by the EU offer of a new Economic Partnership Agreement (EPA) for improving their production capabilities and marketing skills by adopting a regional integration approach, PICs signed the Pacific Island Countries Trade Agreement (PICTA) for ushering in a free trade area (FTA) among the 14 PICs, by 2010.

Towards Freer Trade

However, PICs, which were nervous about the prospect of any immediate removal of barriers due to concern over the impact on local consumer goods industries, as well as the impact on government finances of the resulting loss of tariff revenue (Scollay 2005), decided to keep Australia and New Zealand out of the FTA arrangement amongst themselves. Persuaded by the arguments of PICs that they looked upon PICTA as a stepping-stone for an eventual closer relationship, Australia and New Zealand tacitly agreed to be kept out. However, the latter were successful in getting PICs to sign another agreement known as Pacific Agreement on Closer Economic Relations (PACER) with them. The PACER requires PICs to start negotiations for freer trade in goods with Australia and New Zealand by April 2011. In case, prior to 2011, if any PIC in its negotiations with EU on EPA replacing the Cotonou Agreement gives a reciprocal access to EU leading to FTA, PACER would be triggered earlier than 2011.

Bewildering Complexities

Narsey (2004) suggested a practical solution. This is to enter into a free trade area arrangement with Australia and New Zealand right

away, although there would be revenue loss from abolition of import duties and higher adjustment costs involved. These adjustment costs would be much less now than after 2011, assuming PACER is not triggered until then. During the interim period, any production capability built in consumer good industries, for increased trade exclusively among PICs will be rendered useless, when free trade eventually commences with Australia and New Zealand. Narsey (2004) also suggested that in negotiations with Australia and New Zealand under PACER, PICs, as a "price", should seek relaxation of immigration restrictions for skilled labour from PICs, who can move freely to seek jobs in Australia and New Zealand as well as for limited annual intake of unskilled farm labour with temporary work permits.

While PICs have been left to face the bewildering complexities involved in trade agreements, a Group of Eminent Persons, appointed by the Forum, submitted their report in 2003 on Pacific cooperation. The PIC leaders, who met in Auckland in April 2004 to consider the Report of the Group, appointed a task force, called Pacific Plan Task Force (PPTF) to finalize a Pacific Plan of regional integration.

The Pacific Plan

The PPTF submitted a Pacific Plan to be built upon four pillars: (i) economic growth; (ii) sustainable development; (iii) good governance and (iv) security. Specifically in regard to economic growth, the Draft Pacific Plan, which was finally approved in late 2005 by the Forum leaders in their summit meeting, held in Papua New Guinea, the Plan would seek to integrate trade in services and to create bulk purchasing capacity for essential items such as fuel and medicines. While the item of bulk purchase has been on the agenda ever since 1971 without any progress, the inclusion of trade in services indicates the willingness of PICs to consider deeper integration, of course at "a price". Thus, the ball has been thrown in to the court of the two advanced Forum member countries to consider relaxation in immigration laws. The other three items have been familiar ones: provision of experts in financial management, public sector reforms and strengthening legal machinery, all contributing to better governance.

Single Currency: Some Theoretical Considerations

The gains from adopting a single currency, either through adoption of a major trading partner's currency or by adopting a totally new one, are in terms of increase in efficiency. They arise primarily from two sources. The first is that a common currency eliminates transaction costs usually incurred when trade and investment transactions need currency conversion. Secondly, a common currency eliminates risk from uncertainty in the movements of exchange rate between trading partners (De Grauwe 1994). Furthermore, a currency union provides a potential for reinforcing fiscal discipline and credibility of monetary policy (Masson and Pattillo 2004a and 2004b, Masson and Pattillo, 2001a).

The disadvantages are obvious. They relate to the loss of two important macroeconomic adjustment tools, namely independent monetary and exchange rate policies. The member country has to abide by common monetary policy for the union as a whole; and it has to relinquish its exchange rate, an instrument for protecting itself from economic shocks. However, the costs are less severe if the shocks affect all member countries in the union in a similar fashion, and a common monetary and exchange rate policy *vis-a vis* the rest of the world would then be appropriate. On the other hand if the shocks were asymmetric in nature, affecting the countries in a dissimilar manner, due to reasons such as different industrial structures, a common policy would be the least desirable. In such cases, the inability to use the exchange rate for making necessary adjustments would result in greater volatility in output and employment. However, disadvantages of such a nature can be reduced to a great extent if prices and wages are flexible and if there is perfect labour mobility between member countries. Thus, downward flexibility of wages and prices and labour mobility will enable the member countries in a currency union to withstand shocks of asymmetrical nature (Bayoumi and Ostry 1997).

Based on the foregoing discussion on gains and losses, the Optimal Currency Area (OCA) literature (Mundell 1961, McKinnon 1963, Kenen 1969) identifies the following as key deciding factors for a currency union: openness, intra-trade volume, degree of product diversification, similarity in industrial structures, high correlation in economic activities, similar inflation rates, flexibility in wages and prices and factor mobility.

In a currency union, no individual country can alter the exchange rate rendering it redundant as a policy tool. McKinnon (1963) observed that the more open an economy is, the less effective is the nominal exchange rate as a policy instrument for adjustment. Thus, if an economy is more open, it makes it easier for it to enter into currency union arrangement in that the nominal exchange rate has already become a redundant instrument and therefore its loss as a policy instrument is negligible (Mekanda 2001).

Intra-regional trade volume

The higher the intra-regional trade between the prospective members of the currency union, the greater are the benefits that a common currency is likely to achieve (Bayoumi and Mauro 1999). This is because of the resulting lower transaction costs and avoidance of disruptions of trade-related fluctuations in the bilateral exchange rates between the members of the union that are not warranted by fundamentals.

Degree of product diversification

The composition of trade is another factor of importance. The higher the share of trade in manufactured goods, the greater is the appeal of a currency union among trading partners (Bayoumi and Mauro 1999), for the reason that their prices, unlike the prices of primary commodities being determined in world markets, are largely determined by producers. This is because fluctuation in bilateral exchange rates typically have a more significant impact on intra-industry trade in differentiated but substitutable products than on trade in homogenous primary commodities with a well integrated international market (Eichengreen and Bayoumi 1999). If an economy were more diversified in goods produced, it would export a wider variety of products. In that case, if a fall in the demand for some of its products occurred, the effects of such external shocks would not create large-scale unemployment. On the other hand, if an economy depends on one or two export products, fall in demand for them would be more disastrous, needing exchange rate adjustments. In an open but more diversified economy, if an independent shock affected each of its products, the law of averages would ensure that the economy remained stable. A more diversified economy is more suitable for a currency union

than a less diversified one (Masson and Pattillo 2001a, 2001b, Kenen 1969). The suitability for a currency union gets further enhanced, if sufficient mobility of labour exists to re-absorb labour and capital that have been made idle by shocks (Mekanda 2001).

Similarity in industrial structures

Just as diversified economies are better candidates for currency union, similarities in industrial structures would strengthen their eligibility, since they are affected in a similar way by sector-specific shocks. As such, this eliminates the need for effecting a unilateral change in exchange rate. In other words such economies have less to lose if they are part of a currency union (Bayoumi and Ostry 1997).

Similarity in levels of development

Bayoumi and Mauro (1999) observed that the formal OCA criteria did not include the requirement of similarity in the levels of development in the candidate countries for a currency union. Similar levels of economic and financial sector development in the countries concerned would make it easier for them to enter into a union. It makes sense to look at the nearly five decade-old progress made toward economic integration in Europe, where the process of forming a currency union was associated with a significant degree of economic convergence in real GDP per capita over the years. This process was further supported by steadily growing intra-trade volumes and labour mobility, which were promoted by deliberate integration, leading to formation of a customs union, and followed by a common market. These efforts accompanied fiscal transfers as well to the poorer members (Greece, Ireland and Portugal) of the European Union.

High correlation in economic activities

Even if the countries have different industrial structures, they might display a high degree of correlation in their economic activities. In that case, they can still be considered suitable candidates for a currency union because they are likely to experience similar economic shocks. This reduces the need for autonomy in exchange rate policy. They can afford to have a single currency (Maskay 2003).

Similarity in inflation rates

If countries have similar patterns of inflation rates, it can be concluded that they have been pursuing a similar set of economic policies and their economic structures are also similar. In these circumstances, it can be reasonably concluded that these countries are eligible for a currency union (Ng 2002).

Flexibility in wages and prices

If prices and wages are not sticky but flexible downwards between and among the prospective member countries of the currency union, there will be no need for using the exchange rate as an adjustment tool. In that case, there is a case for currency union (Mekanda 2001, Madhur 2002).

Factor mobility

A high degree of mobility of factors including labour and capital among the candidate countries would provide a substitute for exchange rate adjustments as a policy tool to meet economic shocks. Such countries would gain the most from a currency union (Kuroda 2004, Madhur 2002, Fabella 2002).

Political commitment

Fulfillment of the OCA criteria is only a necessary but not a sufficient condition for ushering in a currency union. One has to clearly recognize the role of politics in monetary integration (Blackman 1998). As a member of the Executive Board of European Central Bank (Padoa-Schioppa 2004) recently observed, monetary integration requires strong political support from all the candidate countries. William Demas, the former Governor of the Central Bank of Trinidad and Tobago, who later became the first Secretary General of the Caribbean Community and Common Market (CARICOM) noted that a single independent currency, which entailed a single set of economic, monetary and fiscal policies, was possible only with a high degree of economic union, tantamount to a political union (Demas 1974). Thus, there should be willingness on the part of the countries aspiring to form a currency union to accept loss of some measure of sovereignty, which affects monetary and fiscal independence. In the Euro zone, besides the surrender of

monetary sovereignty to a supranational authority, fiscal policy is also constrained first by the convergence criteria imposed by the Maastricht Treaty of 1991 and then by the Growth and Stability Pact of 1996. The members of EU were also required to open their capital and labour markets.

Empirical Evidence From The Two Regions

A quick stock-taking exercise reveals there that there are a good number of studies on regional integration with specific focus on the feasibility of a common currency in the two regions. The empirical studies, which emphasized the gains from reduced transaction costs and benefits from elimination of volatility in exchange rate fluctuations, concentrated primarily on the fulfillment of OCA criteria, as preconditions for a currency union. Specifically, these studies examined (i) the extent of pre-union trade between the potential members; (ii) the amount of similarity in the economic structures of the candidate countries and in the nature of shocks affecting them; (iii) the degree of factor mobility, especially of labour or wage flexibility in the absence of labour mobility; and (iv) the practice of fiscal transfers between the potential members (Henry and Downes 1994, Hilaire et al 1994, Worrell 1994, 2003, Anthony and Hallett 2000, Jayaraman 2001, 2005, 2006a).

Evidence from the Caribbean

Empirical investigations in regard to the Caribbean region on the feasibility study on a regional currency union reveal that three of the conditions stated at (i), (iii) and (iv) were not clearly satisfied (Anthony and Hallett 2000). The CARICOM countries are highly open. The openness is measured in terms of total trade in commodities as percentage of GDP of the country concerned.

Intra-CARICOM trade

In their study on trade relations, Anthony and Hallett (2000) estimated that during the mid-1990s, the volume of intra-regional trade among the CARICOM countries, expressed as a percentage of GDP, was relatively very small. Table 4 presents details of degree of openness of 13 from CARICOM member countries. Intra-CARICOM exports ranged from 0.08% for Belize to 11.1% for

Table 4: CARICOM Countries: Imports and Exports and Openness : Mid 1990s (Averages)
(Percent of GDP)

Country	Intra Regional Exports	Intra Regional Imports	Intra Regional Trade	Exports to USA	Imports from USA	Total Trade with USA	Total Openness
Antigua and Barbuda	0.7	9.0	9.7	12.6	20.4	33.0	42.7
Barbados	5.0	6.2	11.2	10.9	17.7	28.6	39.8
Belize	0.1	1.7	1.8	18.4	28.8	47.2	49.02
Dominica	10.2	13.7	23.9	4.0	7.8	11.8	35.7
Grenada	2.4	15.3	17.7	14.3	17.5	31.8	49.5
Guyana	4.2	7.6	11.8	19.9	26.5	46.4	58.2
Jamaica	1.7	6.8	8.5	19.8	37.5	57.3	65.8
Montserrat	0.9	10.8	11.7	NA	NA	NA	NA
St. Kitts & Nevis	0.4	10.6	11.0	3.4	16.3	19.7	30.7
St. Lucia	1.9	11.3	13.2	8.9	16.6	25.5	38.7
St. Vincent & the Grenadines	10.6	14.7	25.3	2.1	16.7	18.8	44.1
Trinidad and Tobago	11.1	1.5	12.6	22.8	19.7	42.5	236.8
							55.1

Source: Anthony and Hallett (2000)

Trinidad and Tobago of GDP. Intra-regional imports were 1.5% for Trinidad and Tobago's GDP, while Grenadian imports formed 15.3% of GDP, which was the highest among all. Overall intra-regional trade, at one end of the scale amounted 1.78% of Belize's GDP. At the other end, it was 25.30% of GDP for St. Vincent and the Grenadines. On the other hand, the region's trade with the USA was substantial. In the mid-1990s, total trade for Jamaica was the highest at 57.30% of GDP, while the lowest figure was 11.80% of GDP for Dominica. The corresponding figures were 42.50% for Trinidad and Tobago and 47.24% for Belize. A much more recent analysis on the intra-regional trade and trade volumes with the USA confirms the continuance of the same pattern, namely, a low proportion of intra-regional trade but a high proportion of the CARICOM trade with the USA (Table 5).

Table 5: Trade Ratios, Intra-Caribbean and Caribbean-US: 2000 (percent of GDP)

	Trade Intra-Caribbean	Intra-Caribbean Trade plus Trade with US
Antigua and Barbuda	6.6	29.6
The Bahamas	0.6	27.2
Barbados	11.4	30.3
Belize	2.6	41.2
Dominica	22.1	43.9
Grenada	15.7	51.7
Guyana	21.0	66.8
Jamaica	5.3	33.7
St. Kitts-Nevis	11.6	52.0
St. Lucia	12.4	34.5
St. Vincent & Grenadines	19.6	38.5
Trinidad & Tobago	9.1	36.5

Source: IMF, Direction of Trade

Similarity in economic structures

Although almost all the CARICOM members are highly dependent on primary exports — agricultural and mineral — as well as on tourism, and hence seemingly have similar economic structures, there are considerable variations. These differences lie in the nature of commodities they produce and the degree of reliance on tourism. While Belize, Guyana, Jamaica and Suriname are dependent on production and exports of natural resource-based goods, Bahamas,

Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St.Vincent and the Grenadines are economies with high dependence on services, including tourism income, besides other income-creating activities. On the other hand, Antigua and Barbuda are dependent on tourism without any other source of foreign exchange (Anthony and Hallett 2000).

Similarity in shocks and disturbances

With a view to finding out whether the CARICOM member countries experienced similar disturbances and shocks, Anthony and Hallett (2000) examined correlation between each country's annual output movements and that of the region as a whole. Table 6 shows a low correlation of individual countries' annual real GDP

Table 6: CARICOM Countries: Correlation of Annual Real GDP Growth with Regional Growth

Country	Correlation Coefficient
Antigua and Barbuda	0.05
Barbados	0.02
Belize	0.03
Dominica	0.35
Grenada	0.39
Guyana	0.52
Jamaica	0.36
Monteserrat	0.07
St. Kitts & Nevis	0.09
St. Lucia	0.18
St. Vincent & the Grenadines	NA
Suriname	0.01
Trinidad and Tobago	0.49

Source: Anthony and Hallett (2000)

growth with the regional real GDP growth, confirming that these countries were not subject to similar disturbances. Referring to Bayoumi and Eichengreen (1996), Anthony and Hallett (2000) observe that it would be difficult to infer whether a given correlation in output reflected the degree of symmetry in shocks or asymmetry in response, since output movements reflect the influences of both disturbances and response. However, as the output correlations are lower than those found in Europe by factors

of 5 or 10, it is obvious that one or the other might be seriously asymmetric (Anthony and Hallett 2000).

Factor mobility

Henry and Downes (1994) observed that labour mobility between CARICOM member countries was negligible. Although there has been substantial progress in recent years with regard to restrictions on the movement of certain categories of skilled labour, the kind of labour mobility covering all categories of labour, which is required for successful operation of a currency union arrangement in the absence of availability of exchange rate as an instrument for correcting economic imbalances, is absent. Anthony and Hallett (2000) also refer to the absence of substantial movement of intra-regional capital flows among CARICOM countries. The principal patterns of both movement of capital and labour mirror those of flows of trade. Labour migration, however, has been predominantly to the USA; and the larger share of capital flows is between CARICOM and the multilateral and bilateral agencies, which lie outside the region (Anthony and Hallett 2000).

Fiscal transfers

One of the ways of correcting imbalances among the prospective members of a currency union is the system of fiscal transfers from a supra body or a commonly set-up fund, open to all. Such fiscal transfers are needed to smooth temporary adjustment in economies hit by large asymmetrical disturbances so that the currency union stays together. Such a provision is needed since the members of a currency union would be handicapped by the absence of an exchange rate tool for meeting recessionary conditions. The European Commission (1977) indicated a fund of seven percent of total GNP would be required for a successful implementation of a common currency in Europe. Anthony and Hallett (2000) observe that there was no such fund in existence and that further, there has been no indication that such a funding arrangement would be eventually brought into being in the event of a currency union.

Currency area rather than OCA

The foregoing discussion indicated there was no convergence of growth rates, which could be attributed to absence of labour and

capital mobility and inadequate development of financial markets. Although the growth rates of CARICOM countries show low correlation with average regional growth rate, the inflation rates appear to be closely associated with that of the US. Figure 1 illustrates convergence in inflation rates. The inference is that

Fig. 1: CARICOM countries and the US: Convergence of Inflation

Figure 1(a)

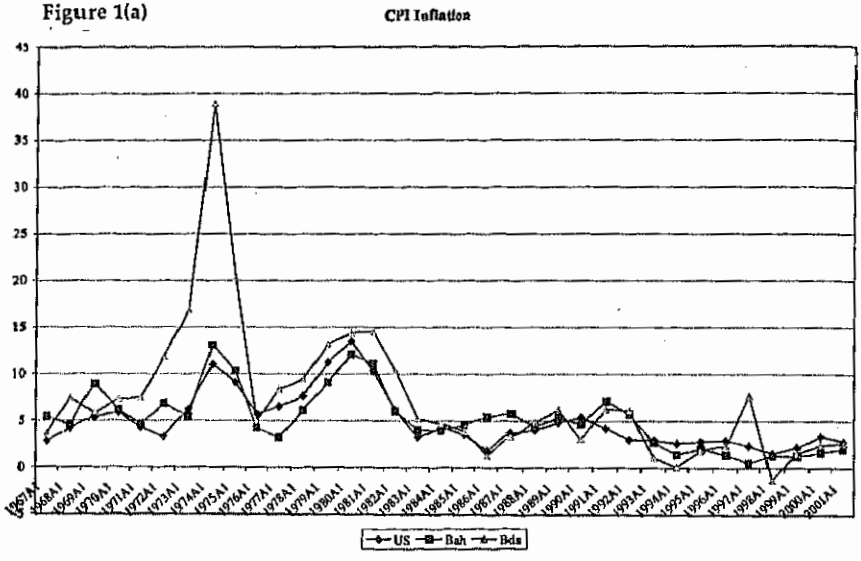


Figure 1 (b)

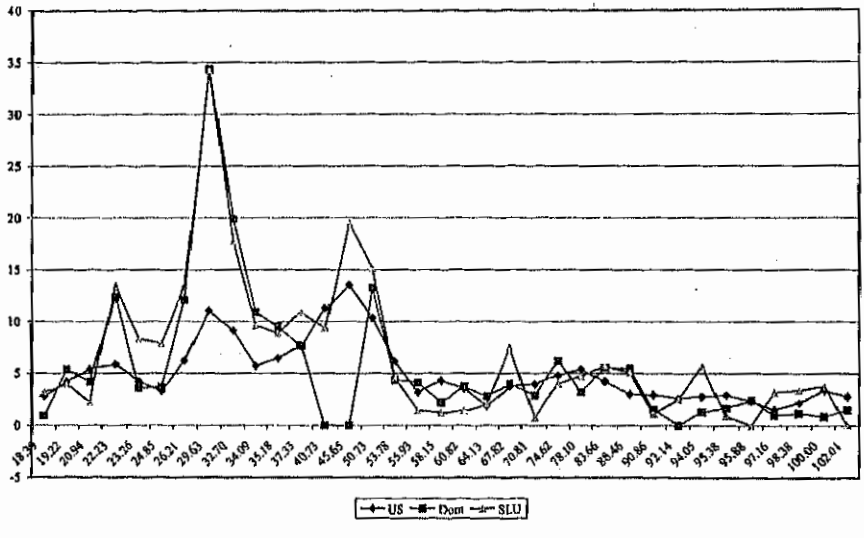


Figure 1(c)

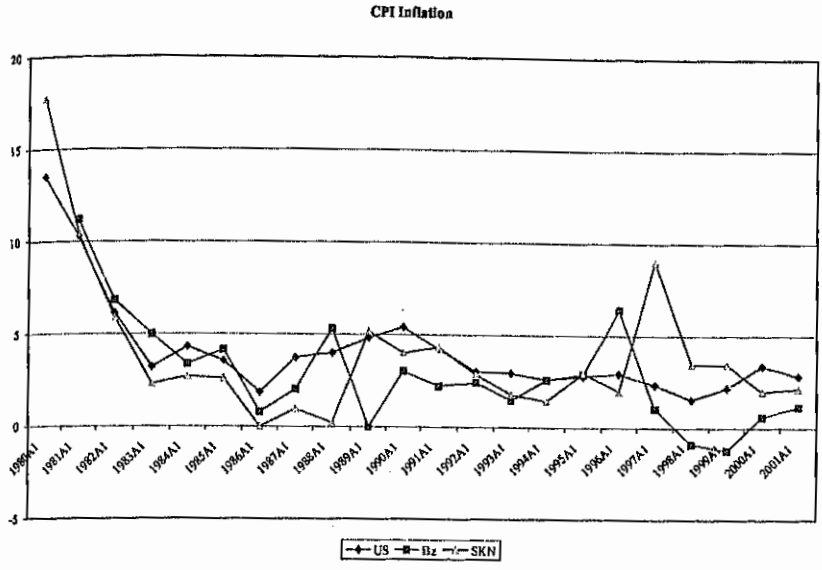


Figure 1(d)

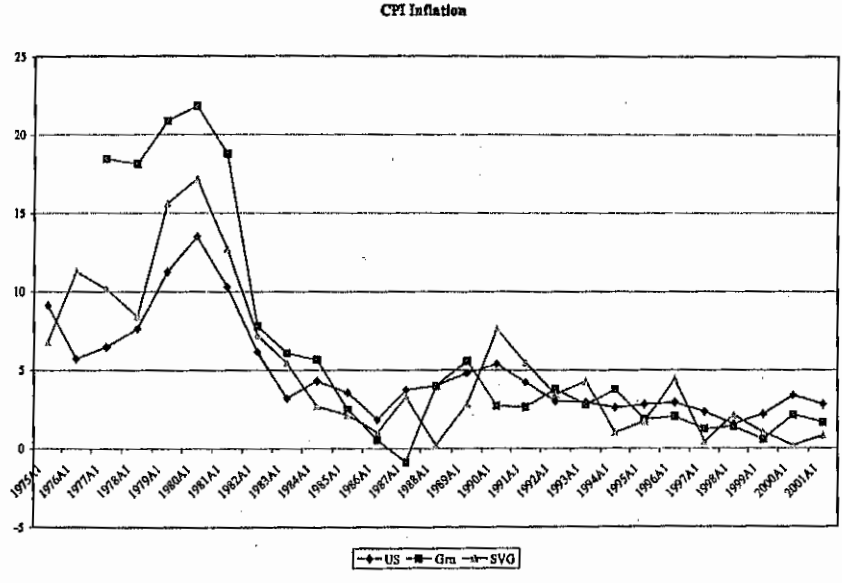
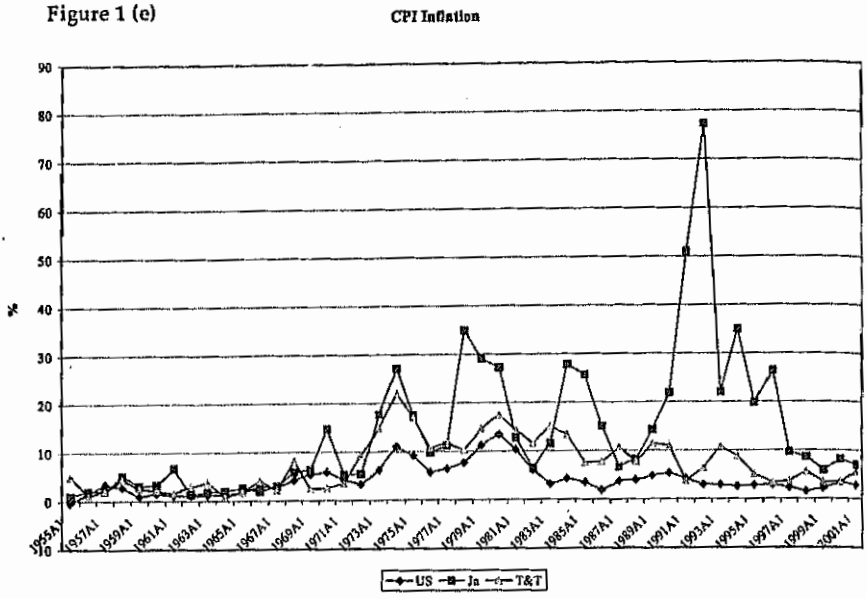


Figure 1 (e)



although the pre-requirement OCA conditions are not fulfilled and hence the Caribbean cannot be considered as an optimum currency area, it can however be looked upon as part of the US currency area. Such a situation also derives policy credibility and synergies from its association with the US in much the same way that the Netherlands, say, depends on Germany, within the EU. Accordingly, Worrell (2003) convincingly argued that the relevant measure is the sum of intra-regional and Caribbean-US trade, not intra-regional trade per se. The trade data highlighted this important point, even though it substantially underestimated the validity of the Caribbean-US OCA, because of exclusion of tourism in the absence of breakdown for tourist expenditure.

Evidence from the Pacific

Table 7 presents a summary of economic indicators (growth rate, inflation and fiscal deficit) of PICs during 1995-2000. The average growth rate of 12 PICs (excepting Nauru and Niue for whom data are not available) is two percent. Average fiscal balance as a percentage of GDP has been reasonably satisfactory, mainly because of foreign aid, providing substantial budgetary support. Low inflation is due to imports to a large extent being from Australia and

Table 7: Growth rates, fiscal and external current account balances and inflation

Category Overall	Average GDP					Average Overall Fiscal Balance					Inflation (%)				
	Growth Rate (%) (1995-1999)	2000	2001	2002	2003	(% of GDP) (1995-1999)	2000	2001	2002	2003	Average (1995-1999)	2000	2001	2002	2003
A. Countries with no separate legal tender															
Cook Is	-1.2	7.9	5.1	2.2	1.8	-4.2	-1.9	1.5	0.2	-3.2	0.1	1.7	9.5	3.9	2.4
Kiribati	4.3	1.6	1.8	0.9	2.5	-3.4	-26.4	7.6	21.4	-13.4	2	0.4	6	3.2	2
Marshall Islands	-5.1	-3.1	1.6	3.8	NA	11.8	8.7	2.2	14.8	14.1	4.9	1.6	1.7	2	2.5
Micronesia	-0.5	4.4	1.1	0.8	NA	-0.9	-6.9	-6.2	2.5	1.9	5.6	2.1	1.3	-0.2	-0.2
Nauru	NA	NA	NA	NA	NA	-41.8	NA	NA	NA	NA	8.9	NA	NA	NA	NA
Niue	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Palau	4.7	NA	NA	NA	NA	17.5	NA	NA	NA	NA	3.5	NA	NA	NA	NA
Tuvalu	5.3	3	4	2	2	4.1	15.4	-54.3	76.5	-16.3	2.8	5.3	1.8	2.6	2.6

Table 7: Growth rates, fiscal and external current account balances and inflation (cont'd)

B. Countries with currencies pegged to a basket															
Fiji	2.1	-3.2	3	4.1	5	-3.5	-3.4	-6.6	-5.6	-6.1	3.2	1.1	4.3	0.8	4.1
Samoa	4.7	6.9	6.2	1.8	3.5	1.1	-0.7	-2.7	-2.1	-0.6	2.2	1	3.8	8.1	0.1
Solomon Islands	2.3	-14.3	-9	-2	-1.9	-3.4	-4.2	-11.5	-11.1	0.9	9.8	7.3	6.8	7.3	8.3
Tonga	2.3	6.5	0.5	1.6	1.9	-1.2	0.5	-0.9	-1.6	-3.1	3.3	5.3	6.9	10.4	11.1
Vanuatu	1.7	2.7	-2.1	-2.8	1	4.7	-6.8	-3.7	-3.2	-1.1	2.5	2.5	3.7	2	3
C. Countries with flexible exchange rate															
Papua New Guinea	0.2	-1.2	-2.3	-0.8	2	-2.1	-2	-3.6	-4.1	-1.7	12.9	15.6	9.3	11.8	11.8

Source: Rosales (2001), Asian Development Bank (2003)
United Nations ESCAP (2004)

New Zealand, whose central banks have been targeting inflation through their monetary policies.

Intra-PIC trade

A summarized comparative picture on regional trading patterns is presented in Table 8. The PICs, except RMI, FSM and Palau, which

Table 8: Trading Patterns (2002)

Country	Intra-PIC Trade (% of GDP)	Openness (% of GDP)
Cook Islands	3.41	61.50
Fiji	0.06	89.26
Kiribati	20.69	124.74
Marshall Islands	0.54	67.60
Micronesia	0.01	52.00
Papua New Guinea	0.18	95.80
Samoa	13.43	56.20
Solomon Islands	3.70	85.89
Tonga	13.61	133.70
Tuvalu	69.70	52.10
Vanuatu	4.13	52.41
Pacific Islands	11.77	79.20
ASEAN (1998)	23.50	101.20
NAFTA (1998)	10.70	23.90
EURO(1998)	24.80	50.80
Mercousur (1998)	4.40	18.10
SAARC (2000)	3.80	25.89

* 2000
** 1999

Source: Author's calculations
For ASEAN: Bayoumi and Mauro 1999
For SAARC: Maskay (2003)
For EURO: IMF(2003)
For Australia: IMF 2003
For New Zealand: IMF (2003)

have been closer to the USA because of the past political relations, have substantial trade with Australia and New Zealand. For example, Australia is the major destination for Samoa's exports (60 percent in 2002), whereas 49% of PNG's imports are sourced from

Australia. Similarly, Fiji exports one fifth of its goods to Australia and imports from Australia more than one third of its total imports.

A detailed review of the patterns and trends of intra-trade among PICs, presented in Table 9 shows that the volume of trade in both absolute and percentage terms are very low (Jayaraman 2005). The major intra-regional trading partners among PICs are Fiji and PNG, which have relatively large manufacturing bases. The PICs, as a whole, lack product diversity. Consequently, all of them have had to depend upon Australia and New Zealand for consumer products, and on Japan and the USA for machinery and transport vehicles and other intermediate products.

These characteristics render their economies more competitive than complementary to each other, resulting in a low volume of intra-regional trade. While one of the principal OCA requirements for a currency union amongst themselves is very weak, there appears to be a case for moving to a closer level of cooperation between PICs and Australia and New Zealand. A higher pre-union volume of trade with Australia is likely to yield substantial gains to PICs in the event of a currency union either by adopting a common currency or by dollarising themselves as transaction costs from conversion and volatility in exchange rates would be totally eliminated (Jayaraman 2005). However, there are other critical factors remaining to be examined. These relate to testing the existence of high correlation in economic activities between PICs and Australia as well as similar inflation rates and existence of any symmetry in supply and demand shocks hitting the countries so that a common set of union wide policies can be pursued.

Correlation of growth rates

Any correlation of economic activities would be reflected in the correlations of economic growth among the countries. Table 10 presents the correlation matrix of annual growth rates in GDP of 13 countries, which include 11 PICs and Australia and New Zealand for a 19-year period (1985-2003), showing both positive and negative correlation between individual countries. What is important is the requirement of positive sign of correlation, as countries should grow together so that a single set of monetary and exchange rate policies, when adopted at the union level, become purposeful. Out of 78 correlation coefficients, only 5 are positive.

Table 9: Intra-Regional Exports and Imports of PICs

Country		Intra-Reg Exports (% of Total	Imports (% of Total	Intra-Reg Trade (% of Total	Intra-Reg Trade (% of GDP)	Exports to Australia (% of Total	Imports from Australia (% of Total	Exports to NZ (% of Total	Imports from NZ (% of Total	Total Trade (% of GDP)
Cook Is	Average of 1994-1997	–	10.26	9.52	4.9	21.07	7.19	25.51	70.94	51.43
	1998	–	11.76	10.83	5.6	28.3	9.75	10.4	68.2	52.45
	1999	–	10.44	9.82	5.2	9.32	8.2	25.2	68.94	54.85
	2000	–	18.49	15.68	12.03	33.91	5.97	25.13	60.58	76.73
	2001	–	11.12	9.74	6.77	29.12	6.1	8.2	74.83	74.4
	2002	–	6.2	5.6	3.41	22.08	6.85	13.9	79.07	61.5
Fiji	Average of 1994-1997	0.31	0.07	0.38	0.505	26.67	39.86	6.99	15.50	76.87
	1998	4.73	0.12	2.13	0.73	33.79	44.84	4.31	15.11	86.84
	1999	6.84	0.1	2.81	0.64	33.02	41.09	4.47	13.10	90.62
	2000	7.11	0.14	3.35	0.94	25.67	48.71	3.53	13.04	89.62
	2001	8.33	–	3.7	0.07	19.74	44.26	3.46	14.88	82.5
	2002	7.21	–	3.02	0.06	19.43	37.31	3.76	17.15	89.26
Kiribati	Average of 1994-1997	–	7.8	5.15	11.67	3.02	18.11		3.94	88.78
	1998	–	10.01	8.7	17.06	4.05	21.82	–	1.69	102.74
	1999	–	14	11.37	16.31	2.59	33.08	–	3.02	98.02
	2000	–	14.21	10.7	22.26	0.24	34.12	–	4.75	80.98
	2001	–	20.8	11.87	21.53	0.39	37.16	–	2.91	91.87
	2002	–	12.67	9.14	20.69	0.38	26.6	–	3.58	124.74
RMI	Average of 1994-1997	–	0.97	0.71	0.46	–	1.31	–	1.01	83.41
	1998	–	0.78	0.7	0.35	–	2.01	–	0.71	67.93
	1999	–	1.16	1.02	0.5	–	1.42	–	0.85	68.94
	2000	–	1.25	1.05	0.54	–	1.46	–	0.89	68.33
	2001	NA	NA	NA	NA	NA	NA	NA	NA	61.3
	2002	NA	NA	NA	NA	NA	NA	NA	67.62	

Table 9: Intra-Regional Exports and Imports of PICs (cont'd)

Country		Intra-Reg Exports (% of Total	Imports (% of Total	Intra-Reg Trade (% of Total	Intra-Reg Trade (% of GDP)	Exports to Australia (% of Total	Imports from Australia (% of Total	Exports to NZ (% of Total	Imports from NZ (% of Total	Total Trade (% of GDP)
FSM	Average of 1994-1997	0.01	–	0.01	0.01	NA	2.62	–	–	65.61
	1998	0.19	–	0.02	0.01	NA	4.02	–	–	64.71
	1999	0.2	–	0.02	0.01	NA	19.79	–	–	64.39
	2000	NA	NA	NA	NA	NA	NA	NA	–	73.07
	2001	NA	NA	NA	NA	NA	NA	NA	NA	53.05
	2002	NA	NA	NA	NA	NA	NA	NA	NA	52.01
PNG	Average of 1994-1997	0.03	0.03	0.06	0.11	27.68	51.43	1.39	4.01	88.89
	1998	0.21	0.24	0.45	0.21	18.72	52.41	0.69	4.12	94.70
	1999	0.18	0.30	0.44	0.23	26.29	53.01	0.16	4.1	114.12
	2000	0.21	0.36	0.57	0.29	29.98	49.54	0.73	3.8	116.45
	2001	0.1	0.21	0.25	0.2	24.62	51.29	1.35	4.02	94.42
	2002	0.10	0.13	0.31	0.18	23.74	49.26	1.32	4.4	95.81
Samoa	Average of 1994-1997	–	10.49	7.70	6.50	84.18	19.18	6.17	35.15	47.89
	1998	–	18.08	11.9	11.6	48.96	16.23	2.74	22.59	51.74
	1999	–	16.67	12.27	11.52	58.95	14.59	3.68	23.01	57.34
	2000	–	9.48	13.02	9.48	57.36	27.31	2.37	13.89	38.69
	2001	–	12.6	9.98	13.64	60.98	13.12	1.42	17.32	59.9
	2002	–	20.33	14.17	13.43	59.5	15.75	2.05	4.25	56.2
Sol. Is.	Average of 1994-1997	0.38	0.66	1.04	1.92	1.38	40.92	0.26	7.43	94.27
	1998	1.07	4.3	5.1	2.66	1.97	42.96	0.35	5.26	108.46
	1999	1.29	3.7	4.36	2.81	1.34	38.53	0.47	6.29	110.78
	2000	2.1	6.1	8.2	3.7	2.79	27.5	0.74	5.63	85.89

Table 9: Intra-Regional Exports and Imports of PICs (cont'd)

Country		Intra-Reg Exports (% of Total	Imports (% of Total	Intra-Reg Trade (% of Total	Intra-Reg Trade (% of GDP)	Exports to Australia (% of Total	Imports from Australia (% of Total	Exports to NZ (% of Total	Imports from NZ (% of Total	Total Trade (% of GDP)
	2001	–	7.46	4.4	NA	1.69	29.27	0.28	5.0	NA
	2002	–	9.1	5.10	NA	0.88	31.31	0.25	5.02	NA
Tonga	Average of 1994-1997	3.08	7.65	6.97	3.76	4.72	33.56	9.66	38.47	51.67
	1998	6.12	7.41	7.26	4.04	4.53	24.68	13.98	36.17	52.4
	1999	2.0	9.96	8.79	4.98	3.21	19.98	8.74	37.22	65.7
	2000	1.65	12.2	9.73	6.65	1.98	10.27	3.68	23.99	79.2
	2001	2.55	19.73	17.1	12.98	1.56	11.24	4.41	33.21	102.9
	2002	2.14	21.42	17.0	13.61	1.44	13.2	3.55	30.83	133.7
Tuvalu	Average of 1994-1997	1.04	30.49	45.5	29.23	–	39.41	–	6.31	81.63
	1998	1.61	59.81	58.39	41.24	–	20.21	–	6.31	70.06
	1999	5.14	63.84	57.18	45.67	–	18.1	–	5.27	79.87
	2000	11.39	58.58	56.01	58.77	–	19.57	–	4.57	104.93
	2001	13.92	65.19	62.48	69.7	–	16.28	–	7.68	52.10
	2002	9.16	54.32	51.1	NA	–	12.9	–	5.21	NA
Vanuatu	Average of 1994-1997	0.01	0.93	0.94	2.67	4.05	21	0.47	5.19	85.58
	1998	1.41	5.67	7.08	3.92	0.60	21.67	0.39	4.76	92.32
	1999	1.19	4.12	5.31	3.98	0.68	17.95	0.44	4.13	122.87
	2000	4.84	8.55	13.39	5.75	0.54	25.08	0.44	6.93	79.24
	2001	–	4.72	3.17	3.58	3.01	25.37	1.12	6.57	53.72
	2002	–	7.11	1.88	4.13	3.20	23.48	0.64	10.69	52.41

NA: Not available
"-" : negligible

Source: Asian Development Bank (2003)

Table 10: Pacific Region: Correlation of real GDP Growth Rates: 1985-2003

	AUS	CI	FJ	FSM	KIR	NZ	PNG	RMI	SAM	SOL	TON	TUV	VAN
AUS	1.000												
CI	-0.451	1.000											
FJ	0.004	-0.024	1.000										
FSM	-0.476	0.529	-0.362	1.000									
KIR	-0.023	-0.280	0.013	0.041	1.000								
NZ	0.346	-0.371	0.075	-0.170	-0.072	1.000							
PNG	-0.172	0.164	0.244	0.323	-0.076	0.221	1.000						
RMI	-0.151	0.052	-0.255	0.252	0.031	0.211	0.041	1.000					
SAM	0.684	-0.249	0.053	-0.319	-0.152	0.387	-0.278	-0.158	1.000				
SOL	0.236	-0.488	0.294	-0.116	0.082	-0.087	0.219	-0.030	-0.031	1.000			
TON	0.489	0.493	0.020	0.592	0.030	-0.363	0.070	-0.109	-0.611	-0.082	1.000		
TUV	0.041	0.155	0.252	-0.156	0.270	-0.268	-0.029	-0.285	-0.181	-0.022	0.134	1.000	
VAN	-0.120	0.111	-0.070	-0.053	-0.115	-0.210	-0.145	-0.066	-0.352	0.156	0.260	0.619	1.000

denotes significance at 5% level

Source: Author's calculations

Among the latter, the growth rate of Australia is significantly correlated only with that of Samoa, while New Zealand's growth rate is not significantly correlated with any country. Similarly, the growth rates of Fiji, Kiribati, PNG, RMI, and Solomon Islands are not correlated with any. Correlation exists only between growth rates of the following pair of countries: Cook Islands and FSM, Cook Islands and Tonga, FSM and Tonga and Tuvalu and Tonga. There is no coherence in growth performance (Jayaraman 2005).

Correlation of Real Effective Exchange rates

An impending currency union would result in the loss of exchange rate as a policy tool. The loss would be minimal for each country, if its pre-union exchange rate has been moving with those of other countries. An important indicator is the real effective exchange rate (REER). The REERs are endogenous prices, which are considered as the outcome of the structure of the economy as well as of domestic and external shocks. If countries were similarly placed in terms of economic structure and external and domestic shocks, their REER movements would display common trends (de Brouwer 2000). Table 11 shows only four out of 15 are significant with positive

Table 11: Pacific Region: Correlation of Real Effective Exchange Rates: 1985-2002

	AUS	FJ	NZ	PNG	SAM	SOL
AUS	1.000					
FJ	0.356	1.000				
NZ	0.533	-0.053	1.000			
PNG	0.683	0.675	0.240	1.000		
SAM	0.381	0.746	0.049	0.451	1.000	
SOL	-0.167	0.384	-0.411	-0.164	0.433	1.000

denotes significance at 5% level

Source: Author's calculations

signs. Australia's REER is significantly related with that of New Zealand and PNG. Fiji's REER is significantly and positively associated with that of PNG and Samoa. The co-movements in REERs are confined only among a few countries. On the other hand, there is substantial divergence, indicating that PICs and

Australia are not prone to similar shocks. While Australia's and New Zealand's REERs are significantly correlated with each other, New Zealand's REER is not correlated with REER of any PIC (Jayaraman 2005).

Nature of shocks

Following the approaches adopted in regard to Sub-Saharan Africa (Bayoumi and Ostry 1997) and the Indian subcontinent (Maskay 2003), the real output growth rate of each country was regressed upon its lags. The residuals were taken to represent the underlying disturbances. Since no decomposition of the disturbances is possible due to the constraints introduced by the procedure of focusing on real output, they are taken to represent a host of factors including natural disasters and poor economic policies as well as political instability. Table 12 reports the correlation matrix of underlying disturbances. Out of 78 correlation coefficients, only 10 are significant at 5% level, six with positive signs and the other four with negative signs. Only those coefficients with positive signs are coefficient. The result is similar to the one obtained in the case of correlations of real growth rates. The conclusion is that the countries studied did not face symmetric patterns of real disturbances during the 19-year period (Jayaraman 2006)

A more rigorous study estimating a structural vector autoregressive (SVAR) model (Jayaraman and Ward 2006) for examining the nature of shocks, external, supply and demand, came to the same conclusion that there was no coherence in the pattern of shocks experienced by the candidate countries. Thus, OCA conditions are not fulfilled.

Mobility of labour and capital

Australia and New Zealand have a high degree of similarity in levels of development. Further, both have sufficient product diversity. The movements in the interest rates and real exchange rates of Australia and New Zealand are also in more unison with each other reflecting a high degree of synchronization of policies between the two countries. Furthermore, there is already a high degree of mobility in labour and capital between the two Tasmanian neighbours. Thus, it is clearly established in clear terms that

Table 12: Pacific Region: Correlations and Standard Deviaation of Underlying Disturbances

	AUS	CI	FJ	FSM	KIR	NZ	PNG	RMI	SAM	SOL	TON	TUV	VAN
AUS	1.000												
CI	-0.339	1.000											
FJ	0.006	0.014	1.000										
FSM	-0.450	[illegible]	-0.418	1.000									
KIR	-0.051	-0.076	-0.047	0.033	1.000								
NZ	[illegible]	[illegible]	0.186	-0.370	-0.285	1.000							
PNG	-0.067	0.093	0.332	0.346	0.071	0.130	1.000						
RMI	-0.094	-0.043	-0.054	0.128	0.066	-0.116	-0.243	1.000					
SAM	[illegible]	-0.190	0.145	-0.260	-0.091	0.416	-0.234	-0.066	1.000				
SOL	0.039	[illegible]	0.250	-0.227	0.252	-0.005	0.159	0.352	0.074	1.000			
TON	[illegible]	[illegible]	-0.152	[illegible]	0.050	-0.469	0.032	0.155	[illegible]	-0.311	1.000		
TUV	-0.151	0.197	0.208	-0.202	0.259	-0.353	0.056	0.076	-0.448	-0.064	0.167	1.000	
VAN	-0.139	0.163	-0.120	-0.125	-0.261	-0.318	-0.199	0.090	-0.337	-0.049	0.226	[illegible]	1.000
SD	0.013	0.040	0.037	0.041	0.056	0.024	0.060	0.054	0.076	0.047	0.027	0.053	0.039

[illegible] denotes significance at 5% level

Source: Jayaraman (2006)

Australia and New Zealand are better candidates for a currency union with each other rather than with PICs.

There is no such labour mobility between Australia and PICs, or between New Zealand and PICs. In the absence of any indication of relaxation of current tight immigration policies allowing for labour mobility between PICs and Australia or New Zealand in the near future, it is difficult to visualize any monetary integration in the short run. It was shown that PICs could not afford to have the same set of policies of Australia, as the challenges of growth and development are different. The absence of co-movements in growth rates, inflation and interest and exchange rates points out that the time is not ripe yet for PICs to adopt the Australian dollar as common currency.

Regarding the possibility of a currency union arrangement among PICs themselves without involving Australia or New Zealand, the pointers are also clear. The pre-union intra-PICs trade is low; the PICs are not diversified; and they lack product diversity. Further, their development levels are different and their growth rates exhibit more divergence than convergence, as the number of significant correlations is just a few. In regard to exchange rates, the trend is the same. Furthermore, there is no symmetry in the shocks affecting PICs and the two advanced countries. The pre-union realities lead to the conclusion that PICs are not suitable candidates for a currency union among themselves or with Australia and New Zealand.

Way Ahead

Evidence gathered thus far indicates that although there has been for some time a general enthusiasm for deeper economic integration of the economies in the two regions, which has been given a further boost in the beginning of a new century by the successful introduction of a single currency in Europe, there is still a large quantum of work remaining to be accomplished. These relate to fulfillment of pre-conditions required for adoption of a single currency in the Caribbean and in the Pacific either by way of dollarisation, with the Australian dollar discontinuing the existing currencies or by having a new currency as legal tender.

The Caribbean region

In the Caribbean region, regional integration has to focus more on promoting intra-regional trade among the CARICOM countries given a much larger trade volume with the USA. A comprehensive regional action plan laid out by Caribbean Trade and Adjustment Group (2003) has recommended that priorities in the report are to: (i) define a coherent approach to international trade policy, strengthen capacity to implement it; (ii) transform Caribbean Development Bank into the region's premier development financing Institution; (iii) revitalize traditional agriculture, with common regional policies for sugar, rice, bananas; (iv) implement a regional tourism strategy — the "Caribbean Brand"; (v) implement a competitive-ness programme, based on the university business schools in the region; (vi) promote a self-sustaining, private sector-led Caribbean economic forum, *a la Davos*; and (vii) develop a regional human resource retention and development programme.

The Pacific region

Empirical investigation has shown that PICs have yet to fulfill the OCA criteria for rendering themselves suitable candidates for a currency union. However, it is possible to argue OCA criteria are to some extent endogenous and currency union might help make the shocks hitting member countries more symmetric in the future and might also expand intra-union trade (Frankel and Rose 2000, Masson and Pattillo 2001a). These arguments are not different from the observations by Scitovsky (1958) when the European Common Market was born. He observed that common currency arrangements would by themselves make the countries similar all along the way.

Focus on regional trade

However, one has to recognize the presence of inherent risks, which are likely to be far greater than the anticipated gains. For these reasons, the Euro zone countries did not plunge into a currency union arrangement, as they were aware of the pitfalls and insisted on fulfilling the convergence criteria contained in the Maastricht Treaty of 1991 and the requirements under the Growth and Stability Pact of 1996. Further, there will be no easy exit from a common currency arrangement once established and it would only be at a

very high cost (Worrell 2003, Farrell and Worrell 1994). Having been aware of the high risks involved in a currency union, the Heads of Governments of CARICOM did not want to take any chances and they prescribed the pre-union convergence criteria, similar to those imposed by the Maastricht Treaty for adopting the common currency, the Euro. The PICs will do well if similar criteria would be adopted for striving towards reaching convergence in say, the next ten to fifteen years.

In the meanwhile, promotion of greater intra-PICs trade has to be given serious attention. Drawing from findings by various research studies, besides his own, on African monetary union efforts covering the West African Economic Monetary Union (WAEMU), Central African, Economic and Monetary Community (CEMAC) and the *rand* zone in southern Africa, Yehoue (2005a) observed that the more the trade between prospective union member countries, the greater would be the increase in the marginal benefit to be derived from the resultant lower transaction costs and reduced uncertainty from the elimination of exchange rate variability. In this context, the recently signed PICTA aimed at free trade by 2012 amongst all PICs and PACER for expanding the free trade area by 2015 to include the two major countries in the region appear to be the most appropriate steps.

However, there are some hurdles and they arise from lack of political commitment on the part of the governments of PICs to free trade. Recent squabbles among Papua New Guinea and Fiji, which imposed quarantine restrictions on each other's products on corned beef, and between Fiji and Vanuatu giving rise to a ban by Vanuatu on biscuit imports from Fiji, and "tit for tat" reaction on the part of Fiji imposing a ban on imports of *kava* from Vanuatu do not augur well for PICTA. It is apparent: "Economic rationality is important for forming a currency union but it goes beyond this: Political will was crucial" (Yehoue 2005b: 256).

Perhaps recognizing the difficulties in reaching a political consensus and forging a commitment amongst a wide spectrum of countries with differing cultures and backgrounds, in a comprehensive study on efforts towards forming an African Union, Masson and Pattillo (2004b) suggested limited monetary integration with a small group of countries. In this light, an initiative by the Melanesian countries with similar racial background and cultures, namely Fiji, Papua New Guinea, the Solomon Islands and Vanuatu

in the early 1990s was an appropriate step, as the four Pacific islands agreed to have closer economic relations by having enhanced trade under an agreement known as Melanesian Spearhead Group Trade Agreement signed in 1994. However, a steady and consistent political frame of mind has been absent to promote the objectives behind the trade agreement. The "biscuit and kava wars" between them, referred to above are constant reminders that there is still a long way to go towards free trade, let alone economic integration.

External push

In these circumstances, an external push might look more attractive. If Australia were keen about dollarization of PICs, the latter are likely to seek and secure some assurances from the former. Since dollarisation would result in discontinuance of their independent currencies, PICs would lose the current revenue flowing from the sovereign right of issuing its own currency (Jayaraman 2004). The PICs would then like to have a share in the seigniorage revenue, which would accrue only to Australia. Secondly, since there would be only one common central bank in a currency union, a given PIC would not be able to support its domestic banks in the event of a bank crisis. In such circumstances, PICs would like to be assured of liquidity support from Reserve Bank of Australia, as a lender of last resort for rescuing their crisis-affected banks. Thirdly, if the Reserve Bank of Australia finds it inopportune to follow an expansionary monetary policy or would not like to use the exchange rate as the policy tool to fight unemployment in one or more of its member countries, PICs would prefer the mechanism of fiscal transfers to needy member countries. Finally, a currency union without mobility of labour and capital would be a failure since PICs would lose the exchange rate as a policy tool to effect corrections in domestic pricing of goods and factors. In the absence of downward flexibility in prices and wages in PICs, labour mobility is the only way to have a successful union. The PICs would legitimately seek assurances on all these issues.

The issues including labour mobility and fiscal transfers have far-reaching implications. They have to be resolved at political levels. It is not yet clear whether these have been resolved even in Australia through a national consensus, let alone reaching an understanding with other Pacific Forum leaders or an agreement amongst the island countries themselves.

Summary and Conclusions

This paper reviewed the past and ongoing efforts towards regional economic integration in the Caribbean and the Pacific. It was shown that both the island countries in the Caribbean region and the island countries in the Pacific region have yet to fulfill the OCA criteria. However, as their relations covering commodity trade, services, especially in tourism and capital flows are intimately connected more with their neighboring advanced countries, the USA in the Caribbean and Australia and New Zealand in the Pacific, they would rather become part of the US dollar and Australian dollar currency areas in respective regions.

This leads to the conclusion that the CARICOM and the Pacific Forum countries should consider at this stage fostering further monetary integration with the US and Australia respectively, rather than aiming at a single currency, which can remain at best a long term goal. Experiences from the European Union should guide the two regions and introduce an area of exchange rate stability in the Caribbean and the Pacific. Once the currencies are locked into the anchor currency, the US dollar for CARICOM countries, as in the case of the Eastern Caribbean nations by a currency board mechanism or the Australian dollar in the case of the Pacific region, elimination of exchange rate instability would lead to rise in intra-regional trade and services, and increase in capital inflows. This will also help realize greater convergence in inflation among the countries. Consequently, convergence in real exchange rates is more likely as the inflation rates of member countries in the Caribbean would converge on the US inflation rate and those of the Pacific island countries on the Australian inflation rate.

However reaching convergence in other critical areas — budgetary stability and sustainable debt and debt-service ratios — would continue to remain elusive unless and until that fiscal discipline is achieved through instrument independence of a common central bank, similar to the Eastern Caribbean Central Bank or the central bank of the anchor currency; such a common central bank should be constitutionally forbidden to lend to governments by way of securities issued on the open market (Worrell 2003). Worrell (28: 2003) cautions us that monetary integration would not itself promote convergence of output in growth, employment and productivity and contribute to sustainable balance of payments since the impact of monetary union on

these variables is neutral, precisely because exchange rate policy is not an effective tool. The immediate or short-term effect on labour markets would be little. Further, fiscal policy could not be the same among the member countries because of their structural differences as in the case of Trinidad and Tobago, the CARICOM's only oil exporter or in the case of Fiji and PNG, which are more diversified than other Pacific island countries. Policies other than nominal exchange rate policies, such as labour market reforms and other structural policies must be used to ensure convergence in the critical variables in the long run to realize the dream of a single common currency for the two regions.

To conclude, since there is little to suggest that the US would welcome an attempt to include its dollar into a monetary union with members of the CARICOM, nothing would however prevent the regional authority from pegging their currency to the US dollar. On the other hand, we find that Australia, the major player in the Pacific region, is keen about a currency union with Pacific island countries for ushering in an era of fiscal and monetary discipline and economic stability. If the Pacific island countries want to keep out Australia/New Zealand and form a currency union with a currency of their own, the gains would be minimal as pre-union intra-trade volumes are low. However, by forming a respective union amongst themselves, both the Caribbean and the Pacific regions, would still be presenting a single economic space for attracting foreign investors who would find a larger market without tariffs and other barriers to trade more attractive. Further, if the Pacific islands positively respond to the Australian call for a currency union by adopting the Aussie dollar, assuming the long run structural policies, including labour market reforms would be put in place, the gains are likely to be decidedly larger, as the pre-union trade volumes between PICs and the two advanced Forum member countries are sizeable.

References

Anthony, M.L. and A.H. Hallett (2000). "Is the case for Economic and Monetary Union in the Caribbean Realistic?" *World Economy*, 23 (2), pp 119-244.

Asian Development Bank (ADB) (2003). *Key Indicators of Asian and Pacific Developing Countries 2003*. Manila: Asian Development Bank.

Australian Agency for International Development (AusAID) (2001). *Pacific: Program Profiles: 2000–01.* Canberra: Australian Government Overseas Aid Program.

Australian Senate Committee Report (2003). *A Pacific Engaged: Australia's Relations with Papua New Guinea and the Island States of the Southwest Pacific,* Canberra: Commonwealth of Australia.

Bayoumi, T. and B. Eichengreen (1996). "Operationalizing the Theory of Optimum Currency Areas", *CEPR Discussion Paper No. 1484*

Bayoumi T., and P. Mauro (1999). *The Suitability of ASEAN for a Regional Currency Arrangement,* IMF Working Paper WP/99/162, Washington, DC: International Monetary Fund.

Bayoumi, T. and J.D. Ostry (1997). "Macroeconomic Shocks and Trade Flows within Sub-Saharan Africa: Implications for Optimum Currency Arrangements", *Journal of African Economies,* 6(4), pp 412-444.

Blackman, C. (1998). *Central Banking in Theory and Practice: A Small State Perspective,* St Augustine, Trinidad: Caribbean Centre for Monetary Studies.

Bowman, C. (2004). "Pacific Island Countries and Dollarisation", *Pacific Economic Bulletin,* 19(3), pp 115-132

Caribbean Community and Common Market (2005). www.caricom.org

Caribbean Trade and Adjustment Group (2003). *Improving roving Competitiveness for Caribbean Development,* Kingston: Ian Randle Publishers.

Chand, S. (2003). " An Assessment of the Proposal for a Pacific Economic and Political Community", *Pacific Economic Bulletin,* 18 (2), pp 117-124.

de Brouwer, G., 2000. "Should Pacific Island countries Adopt the Australian dollar?", *Pacific Economic Bulletin,* 15(2). pp 161–9.

de Grauwe, P. (1994). *The Economics of Monetary Integration,* New York: Oxford University Press.

Demas, W. (1974). *West Indian Nationhood and the Caribbean Integration,* Barbados: CCC Publishing House.

DeMello, J. and A. Panagaria (1992). "The New Regionalism", *Finance and Development,* December. pp 37-40.

Eichengreen, B. and T. Bayoumi (1999). "Is Asia an Optimum area? Can it Become One?" in S. Collignon, J. Pisani-Ferry and Y.C. Park (eds.) *Exchange Rate Policies in Emerging Asian Countries,* London: Routledge, pp 137-158.

Fabella, R. (2002). "Monetary Cooperation in East Asia", *Economics and Research Department Working Paper No.13*, Manila: Asian Development Bank.

Farrell, T. and D. Worrell (1994). *Caribbean Monetary Integration*, Port of Spain: Caribbean Information System.

Fairbairn. T and D. Worrell (1996). *South Pacific and Caribbean Island Economies: A Comparative Study*, Brisbane: The Foundation for Development Cooperation.

Frankel, J. A, and A. K. Rose (2000). *Estimating the Effect of Currency Unions in Trade and Output*, National Bureau of Economic Research Working Paper (NBER) No.7857, Cambridge, Mass: NBER.

Fry, G. (2005). "Pooled Regional Governance in the Island-Pacific: Lessons from History", *Paper presented at the International Workshop on Pacific Integration and Regional Governance, Asia* Pacific School of Economics and Government, Australian National University, Canberra, June 2005.

Henry R. and A. Downes (1994). "Labour Market Issues in Caribbean Monetary Integration", in T. Farrell and D. Worrell (eds.) *Caribbean Monetary Integration*, Port of Spain: Caribbean Information Services.

Hillaire, A., H. Codrington, J. Robinson and W. Samuel (1994). "Options for Monetary Integration in the Caribbean", in T. Farrell and D. Worrell (eds.) *Caribbean Monetary Integration*, Port of Spain: Caribbean Information Services.

Hughes, H. (2003). *Aid has Failed in the Pacific*, Issue Analysis No.33. Sydney: The Centre for Independent Studies.

International Monetary Fund (IMF) (2003). *International Financial Statistics Yearbook 2003*. Washington, DC: Canberra.

Jayaraman, T.K. (2001). "Prospects for a Currency Union in the Pacific: A Preliminary Assessment", *The Journal of Pacific Studies*, 25(2), pp 173-2001.

Jayaraman, T.K. (2004). "A Single Currency for the Pacific Island Countries: A Stepwise Approach", *Asia-Pacific Development Journal*, 11(1), pp 91-111.

Jayaraman, T. K. (2005). "Dollarisation of Pacific Island Countries: A Feasibility Study", *Perspectives in Global Development and Technology*, 4 (2), pp 197-227.

Jayaraman, T. K. (2006a). "A Single Currency for the South Pacific Countries?" in M. Powles (ed.) *Pacific Futures*, Canberra: Pandanus Books, Australia National University Press, 109-26.

Jayaraman, T. K. (2006b). "Patterns of Shocks and Regional Currency for the Pacific Islands". *Journal of Economic Integration*, 21 (1), pp 99-119.

Jayaraman, T. K. and B. Ward (2006). "A Single Currency for Pacific Island Countries: An SVAR Analysis", *Economia Internazionale*, LIX (1): 83-112.

Jayaraman , T. K, B. Ward and X. Zu (2007). "Are the Pacific Islands Ready for A Currency Union? An Empirical Study of Degree of Economic Convergence", *Journal of Asia Pacific Economy*. Forthcoming.

Kenen, P. B. (1969). "The Theory of Optimum Currency Areas: an Eclectic View", in *Monetary Problems of the International Economy*, Eds. R. Mundell and A. Swoboda, University of Chicago Press, Chicago, pp 41–60.

Kuroda, H. (2004). "Transitional Steps in the Road to a Single Currency in East Asia", *Statement made at the Asian Development Bank Seminar on Single Currency for East Asia-Lessons from Europe*, Jeju, Korea, May 2004.

Madhur, S. (2002). "Costs and Benefits of a Common Currency for ASEAN", *Economics and Research Department Working Paper No: 12*, Manila: Asian Development Bank.

Maskay, N. M. (2003). "Patterns of Shocks and Regional Monetary Cooperation in South Asia", *Working Paper No.WP/03/240*, Washington, DC: International Monetary Fund.

Masson, P. and C. Pattillo (2001a). "Monetary Union in West Africa: An Agency of Restraint for Fiscal Policies", *IMF Working Paper*, WP/01/34, Washington, DC: IMF.

Masson, P and C Pattillo (2001b). "Monetary Union in West Africa (ECOWAS): Is It Desirable and How Could It Be Achieved", *Occasional Paper No.204*, Washington, DC: IMF.

Masson, P. and C. Pattillo (2004a). "A Single Currency for Africa", *Finance and Development*, 41 (4), pp 9-15.

Masson, P. and C. Pattillo (2004b). *The Monetary Geography of Africa*, Washington, DC: Brookings Institution.

McKinnon, R. I. (1963). "Optimum currency areas", *American Economic Review*, 53, pp 717–24.

Mekanda, B. K. (2001)."Is Africa an Optimum Currency Area?", *Working Paper No: 41*, Department of Economics, Goteborg University.

Mundell, R. (1961). "A theory of optimum currency areas", American *Economic Review*, 51, pp 657–64.

Narsey, W. (2004). "PICTA, PACER, and EPAs: Where are we going? Tales of Fags, Booze, and Rugby", *Working Paper No: 6*, Economics Department, Suva: University of the South Pacific.

Ng, T.H. (2002). "Should the Southeast Asian Countries Form a Currency Union?", The *Developing Economies*, XL (2), pp 113-34.

Pacific Islands Forum Secretariat (2005). *Working Draft: The Pacific Plan for Strengthening Regional Cooperation and Integration*, Suva: Forum Secretariat.

Padoa-Schioppa, T. (2004). "Regional Monetary Cooperation in a Globalised World", *Paper presented at the Asian Development Bank Seminar on Single Currency for East Asia-Lessons from Europe*, Jeju, Korea, May 2004.

Rosales, J.R. (2001). Macroeconomic Policy and Financial Sector Stability in Pacific Island Countries. *Paper presented at the Conference on Financial Sector Stability and Development*, Apia, 2–21 February.

Scitovsky, T. (1958). *Economic Theory and Western European Integration*, London: Allen & Unwin.

Scollay, R. (1998). "Free Trade Options for the Forum Island Countries", *Report prepared for the South Pacific Forum Secretariat*, Suva: Forum Secretariat.

Scollay, R. (2005). "Deeper Integration with Australia and New Zealand? Potential Gains for Pacific Islands", *Paper presented at the International Workshop on Pacific Integration and Regional Governance*, Asia Pacific School of Economics and Government, Australian National University, Canberra, June 2005.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (2004). *Economic and Social Survey 2004*. Bangkok: UNESCAP.

Urwin, G. (2004). *Economic Development of Pacific Island Economies and Regional Cooperation*. Public Speech at the University of the South Pacific, May 18, 2004. http://www.forumsec.org.fj.

World Bank (2005). *A Time to Choose: Caribbean Development in the 21st Century*, Washington, DC: World Bank.

Worrell, D. (2003). "A Currency Union for the Caribbean", *IMF Working Paper, WP/03/35*. Washington, DC: IMF.

Yehoue, E. (2005a). "On the Patterns of Currency Blocs in Africa", *IMF Working Paper, WP/05/45*. Washington, DC: IMF.

Yehoue, E. (2005b). "What does the Future Hold for Currency Blocs in Africa?", *IMF Survey*, 29(16). pp 256-257.