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Assessment of Economic Growth Aspects and Prospects in South Pacific Countries Till 2015

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Abstract

The South pacific region is a source of cauldron of major powers attracting the attention of Australia, China and USA but dominated for the last half a century by Australia. This paper analyses the growth trend in the South Pacific countries. The parameters analyzed are Unemployment, Import-Exports and Tourism through the time series data obtained from IMF, WTTC. The results show a significant impact of Import-Exports and Tourism on the GDP of these countries which has been shown by the significance of the model. The parameters like unemployment rate, Import and Export and Tourism sector of South pacific Countries are analyzed after calculating the growth rates. The Time Series data of 25years is obtained from the IMF, WTTC and the World Bank. Four growth rate formulas are used for robust analysis are OLS, Log Difference, Average Annual Growth Rate and Geometric Average rate. Model used for regression: GDP= α+β1(Net Exports)+ ?2(Tourism contribution)+ ?. Analysis is done for 20year time period till 2015 for Fiji, East Timor, Samoa, Solomon Islands, Tonga, Kiribati with exclusions due inconsistency in data availability. Unemployment calculation was done to show the need to assess the economics of these neglected South Pacific Island Countries and how Trade composition in exports and Imports, Tourism is impacting growth and consequent need for Aid. Narayan's approach was used to study the role of tourism for this paper. Four sections excluding the introduction and conclusion is done. Finally potential role for India is highlighted.

Keywords: *GDP, Unemployment Rate, Imports and Exports, Tourism*

Introduction

The International Climate for India faces pressure from South East Asian region due to the towering influence of China and also the ominous Western presence from Australia and new Zealand. This is the motivation to study how some of the South pacific Countries are doing and whether the economic barometer demands a presence and economic role for india.

Analysis has been conducted to show the growth trend in the South Pacific countries. The parameters analyzed are Unemployment, Import-Exports and Tourism. The implications is further studied through the time series data obtained from authentic sources like IMF, WTTC. The results show a significant impact of Import-Exports and Tourism on the GDP of these countries which has been shown by the significance of the model.

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Regan, A & May, R 2001 focused on the role Australia plays in the South Pacific Region esp towards Papua Guinea and other areas allied to it.. The Regional Assistance Mission to Solomon Islands (RAMSI) discussed how Australia can intervene to maintain peace and stability of the region but the nature of its engagement with Papua New Guinea is stated as having potential to harm the region.

Tevita Motulalo in 2013 stated that due to the shifting of global strategic influence towards south pacific due to Chinese expansion and USA's interests, India's engagement in the region is imperative to maintain economic and strategic stability. Criticizing its Fiji centric engagement in the region, the author expresses broader partnerships in the south pacific region as mutually beneficial.

Emergence of China in the Pacific Islands region has been one of the most important developments in regional affairs over the past decade. China's aid to South Pacific has been increasing and by 2011, it had become the third largest donor to the region behind Australia and United States. Although its South Pacific engagements are largely seen as a way to dominate the region its motivations are diverse and ever expanding with time.

The growth of Chinese influence in the region has caused the US to shift back to the Pacific. US regional engagement is expanding again, including diplomacy with the Forum and with Fiji, potentially undermining the Australian stance. It is seen as imperative for United States of Americato give more emphasis to the Asia-Pacific to counter China's growing influence.

Milne (2005) wrote on tourism having the potential to stabilize these Smaller economies of South pacific. Narayan (2005, 2007) analyzed the impact of tourism on the economic growth in 4 south pacific countries: Fiji, Papa New Guinea, Tonga and Solomon Islands. The relationship between the economic growth and tourism is seen as canonical: Economic growth leads to tourism and Tourism leads to Economic growth.

Methodology

The parameters like unemployment rate, Import and Export and Tourism sector of South pacific Countries are analyzed after calculating the growth rates. The Time Series data of 25years was obtained from the IMF, WTTC and the World Bank. Four growth rate formulas are used for robust analysis are OLS, Log Difference, Average Annual Growth Rate and Geometric Average rate. Model used for regression: GDP= ?+?1(Net Exports)+ ?2(Tourism contribution)+ ?

Analysis was done for 20year time period till 2015 for Fiji, East Timor, Samoa, Solomon Islands, Tonga, Kiribati with exclusions due inconsistency in data availability. Unemployment calculation was done to show the need to assess the economics of these neglected South Pacific Island Countries and how Trade composition in exports and Imports, Tourism is impacting growth and consequent need for Aid. Narayan's approach was used to study the role of tourism for this paper.

Problematic of Unemployment an Endemic Issue

In South Pacific countries of Fiji, East Timor, Solomon Islands and Papuan New Guinea only, unemployment has not changed much since 1991. Fiji's unemployment rate has increased as proportion of its total population while the rest three do not show a significant drop in unemployment. The paper tried to find a link between Fiji's Economic growth measured as a growth rate of output and unemployment by utilizing the annual data over period of 1991-2014 on percentage of total labor force unemployed. Its findings established presence of long-run association among unemployment and economic output. Also lower growth in economy does not fully justify the increase in unemployment rate unless Investment increased.

22% of Fijian adults were employed in service and sales occupations at the time of the 1996 Census. This was the most common occupation amongst Fijian people who were aged 15 years and over. A further 19% were employed in clerical jobs. There were noticeable differences between the occupations of Fijian men and women. Almost twice as many women (29%) were working as sales and service workers than men (15%). Similarly, women were three times more likely (30%) than Fijian men (9%) to be employed in those clerical jobs. On the other hand, men were more likely than women to be employed as trade workers (16% compared with 1% for women), plant and machine operators and assemblers (14% compared with 5%), or employed in the elementary occupations (14% compared with 8%). In

East Timor 80% of the population of East Timor depends on agriculture for food and income but most families in rural areas can only produce enough food to last at max for eight months of a year. So as a result of this malnutrition there is very high specially among children below 5 years of age. Its contribution toward GDP has fallen from 30.14% in 1999 to 4.6% in 2013.

In Solomon Islands 41% of household income comes from agriculture and 42% of total labour force is engaged in Agriculture and forestry activities as their main economic activity. 80% of predominant occupation is subsistence agriculture. Agriculture is generally done for yams, bananas, taro, sweet potatoes, vegetables. In commercial sector, a fast growing sector centered on coffee, cocoa, coconut and kava. Niche crops like spices and vanilla are growing steadily. Large scale plantation is generally of palm oil and coconut.

Agriculture alone contributes 24% to GDP while rest other sectors the rest 76%.

In Papua New Guinea mostly involved in agricultural activities, forestry, hunting and fishing. In 2013 agriculture contributed 27.4% in GDP of Papua New Guinea. Agriculture includes all these forestry, hunting, agriculture and Fishing.

Unemployment in Fiji, East Timor, Solomon Islands and Papua New Guinea has not shown very significant change instead there is more unemployment in Fiji in 2014 than it was in 1991 and rest three don't show a significant drop in unemployment. Mainly the reason, for why the unemployment has not gone down in these countries, is due to lack of good policies designed by policy-makers or low investments in these countries, that might create any kind of employment opportunities for people of these countries.

The level of private investment has remained weak and below 5 per cent of the GDP since 1992. Public sector investment while strong between 1993 and 1995 has declined since 1996. Therefore, the total level of investment in the country has declined over the last few years. Unexpected commitments such as the bailing out of the National Bank of Fiji led to an increase in the deficit in 1996 and 1997.

Taken together, these figures infer that Fiji's objectives and strategies to reduce unemployment have been unsuccessful over the past years as it has been on a rise. On the contrary unemployment has only increased over the 24-year period considered here.

The level of private investment has remained weak and below 5 per cent of the GDP since 1992. Public sector investment while strong between 1993 and 1995 has declined since 1996. Therefore, the total level of investment in the country has declined over the last few years. Not enough job opportunities were being created there along with a burden of subsistence agriculture which finally broke out as high unemployment in 2001.

Unemployment in Solomon Islands has been almost same in past 24 years as it can be inferred from the graph. If we check the calculated values by OLS method, Log Difference Regression, Average Annual Growth Rate and Geometric Average, we can observe that there has been a very small decline in unemployment no matter what so ever policies were created by policy makers.

Unemployment in Papua New Guinea has been almost same in past 24 years as it can be inferred from the graph and data since 1991. If we check the calculated values by OLS method, Log Difference Regression, Average Annual Growth Rate and Geometric Average, we can observe that there has been a very small decline in unemployment no matter what so ever policies were created by policy makers.

Different Growth Rate Results:

Table: 1 Numerical Values calculated by OLS Method

Country	*OLS Method*
Fiji	0.020866
East Timor	-0.02457
Solomon Islands	-0.00451
Papua New Guinea	-0.0047

Table: 2 Log Difference Regression Values

Country	*Log Difference Regression*
Fiji	0.006505547
East Timor	-0.02032
Solomon Islands	-0.0011
Papua New Guinea	-0.00335

Table: 3 Average Annual Growth Rate Values

Country	*Average Annual Growth Rate*
Fiji	0.015
East Timor	-0.01195
Solomon Islands	0.000426
Papua New Guinea	-0.00153

Table: 4 Geometric Average values

Country	*Geometric Average*
Fiji	0.006527
East Timor	-0.02011
Solomon Islands	-0.0011
Papua New Guinea	-0.00334

Is Increasing Foreign Trade an Answer?

The South Pacific countries have been heavily relied on imports but during the past decade have taken tremendous strides in exports. To study the foreign trade i.e. imports and exports, assumption were that these countries were independent and consistent data available for the required time period.

In Pacific Island economies-The role of international trade and investment (Centre For International Economic')s focuses on foreign trade in the South Pacific Region. The issues discussed in the report include tariffs and barriers to foreign trade, geographical size and location constraints. The exports and imports flow is large compared to the GDP of the region. An increasing trend of imports and exports is reported. The relative importance of exports and imports in contributing to economic growth in the PICs has increased in relevance in the light of growing trade deficits for the PICs.

Fiji mainly imports manufactured goods, petroleum products, machinery and equipment and food and chemicals. As evident from the graphs all the above four south pacific countries' imports have been increasing rapidly barring a dip in 2008-09. This was probably due to the Recession of 2008 which had worldwide negative impact. Fiji was the most severely affected with almost a 37% decline. The other countries showed much less decline owing to the fact that they have much lesser import volume compared to Fiji.

The country with the highest average annual growth rate of imports in the last decade was for Solomon Islands at 0.21. Fiji's imports grew at an average of 0.14 annually while that of Tonga was 0.08.

Most of the south pacific economies are located on isolated and small islands and so face many problems like lack of economies of scale in production of goods and services and high vulnerability to natural disasters. Distance and infrequent transport also creates problems. Most of the pacific island countries' food and agriculture production has been poor and so has to rely on imported food. This is one of the reasons of increasing imports in all the four above countries.

These countries should try to reduce its high growth of imports and develop its agriculture sector and other industries. Its heavy reliance on imports which would help them save resources, would create employment opportunities which will help create stronger economies.

It is evident from the graphs that export from the region shows an upward trend more or less. Fiji's exports have grown at an average annual growth rate of 0.10 in the last decade. There was a decline in exports during 2008-09 due to the Global Recession during that period. The average annual growth rate of Solomon Islands is very high at 0.24. Samoa have been struggling to increase their exports, which have remain almost constant during the last decade barring a few minor ups and downs.

The main exports of the region are sugar, garments, gold, timber, fish, prawns molasses, mineral water and coconut oil. Tuvalu and Tonga earn a huge portion of income selling domain names.

In 2005 Fiji's top 5 exports destinations were Singapore, Australia and United States. Other countries like China's contribution to exports were very small. But in 2014 China's share had grown to 6%, probably implying China's growing role in the region. Singapore, Australia and United States had a decline and exports destinations become more diverse.

In 2005 Solomon Islands top exports destinations were China, Korea, Philippines and Japan. But in 2014 China had become the top exports partner with a 58% share. Australia too has increased its share to 11%. Here too China's increasing role and influence in the region can be seen by its staggering increase in trade with countries of the region.

In Samoa's export share Australia's contribution has increased from 58% to 75%. The United states contribution has grown 2% in the last decade which is very slow. Australia's high contribution may indicate that Australia's dominance in the region is not over. It still has huge amount of influence in many Pacific Island Countries, Samoa being one of them.

Japan used to be leading importer of Tonga's exports but is now led by New Zealand. United States share too have declined. China's contribution too has grown tremendously in the last decade. Australia's share to have increased three times in the past 10 years.

The top import origins of Fiji were Singapore, Australia and New Zealand. Singapore has been holding the top spot for more than a decade with an increasing share. Australia's contribution have increased nearly two times while New Zealand's have shown steady growth.

Australia have been the top import origin for Solomon Islands for the past decade but its contribution to the total imports have declined considerably. Singapore has emerged as a popular import destination for Solomon Islands during the past 10 years. China's share has grown justifying its growing role and influence the region.

New Zealand used to be the top exporter to Samoa but it has since declined from 33% in 2005 to 22% in 2014. Australia's and United States of America's exports share to Samoa have reduced. The imports origins of Samoa have increased and it has become more diverse.

New Zealand remains the most popular import destination of Tonga although declining by nearly 10%. Singapore's share has increased but Australia's share has seen a slow decline. United States of America's contribution has increased by a small amount so is the contribution of Japan.

Compositions of Imports and Exports:

Foodstuffs, machinery, mineral fuels, beverages, tobacco, and manufactured goods are the principal imports. Fiji's main exports are sugar, garments, gold, timber, fish, molasses, mineral water and coconut oil. Other domestic exports that have increased for the past five years are ginger, flour, taro and sweet biscuits.

Rice and Fuel Oil comprises a major portion of import. Roughed Wood and processed food comprises a major portion of the export.

Insulated wire and Non fillet frozen fish covers a major portion of exports. Refined Oil and Poultry Meat comprises a major portion of imports.

In 2013 Tonga exported $12.9M, making it the 215th largest exporter in the world. During the last five years the exports of Tonga have decreased at an annualized rate of -3.7%, from $15.5M in 2008 to $12.9M in 2013. The most recent exports are led by Other Vegetables which represent 22.7% of the total exports of Tonga, followed by Non-fillet Fresh Fish, which account for 11.1%.

In 2013 Tonga imported $188M, making it the 205th largest importer in the world. During the last five years the imports of Tonga have decreased at an annualized rate of -1.4%, from $202M in 2008 to $188M in 2013. The most recent imports are led by Refined Petroleum which represents 22.3% of the total imports of Tonga, followed by Planes, Helicopters, and/or Spacecraft, which account for 8.55%.

Need for Foreign Aid:

Countries	*Aid(% of GDP) (2002-03)*
Cook Islands	3.5
Fiji	2.3
Kiribati	31.5
Palau	20.5
Papua New Guinea	6.4
Samoa	10.4
Solomon Islands	25.7
Tonga	16.3
Tuvalu	38.6
Vanuatu	11.7

Economic Aid is a substantial portion of GDP of many countries. Aids to smaller countries like Kiribati, Palau, Solomon Islands, Tonga and Tuvalu have a much larger portion of their GDP as compared to the larger countries like Papua New Guinea and Fiji which receives much lesser aid comparatively.

Need for Tourism:

Tourism industry has impacted the economy of South Pacific countries. The data provided has been analysed to develop strategies having better yield orientation. It is important to define the impact and value of the tourism sector to the growth of South Pacific Countries.. The countries taken into consideration for studying are Fiji, Kiribati, Solomon Islands and

Tonga, the choice of these countries is strictly due to data availability. Analysis has been done using the data of past 20-30 years. The parameters of Tourism which have been used for this analysis include: 1-Contribution of Tourism to GDP in US$ dollars 2-Visitor Arrivals

Analysis of these 4 countries has been done individually in a descriptive manner rather than in a comparative manner strictly because of the difference in the scales of the industry.

Fiji's Economic growth has largely been driven by its tourism industry. Fiji has the highest number of tourist arrivals in the entire Pacific region with people visiting from Asia, Australia and the European continent. Tourism as an industry has significantly contributed to the country's GDP as can be seen from the above the above graph (1.1)(Narayan.2005), it has also contributed by generating a lot of employment options for the local populous. It can be seen from the graph 1.2 that there was a rise in the tourist arrivals in 1997, 1998. Reason for this was mainly because of the devaluation of the Fijian dollar by 20% as a result of the Asian financial crisis causing a dip in the contribution of Tourism in that period (Jayaraman and Chong,2008).There was a sudden dip in the tourist arrivals in 2000 as a result of the political turmoil in Fiji as there was a transfer of power from Non ethnic to Ethnic Fijians which resulted in a lot of policy changes also making the laws more stringent for the non-Fijians. It took almost 3 years for Fiji to increase its tourist arrivals to the same number. Following this period was a 2006 coup in Fiji because of the political unrest, this however didn't reduce the number of arrivals but lowered its contribution to the GDP as a result of devaluation of the currency, Severe blow was suffered due to the 2009 GFC (global financial crisis) wherein the contribution almost decreased by 25% resulting in the higher unemployment rates. Though this reduced the contributions to GDP it didn't affect the number of arrivals because of the low expenditure.

Tourism is a major component contributing to the growth of Kiribati in terms of GDPbut the contribution is comparatively less as compared to Fiji. The contribution as estimated by WTTC states that the percent share of Tourism in this country varied between 4 to 9 %(1980-2000). The main reason for the lowered contributions of tourism were the policies framed during this period. These policies were more inclined towards the phosphate reserves. Phosphate was a main contributor of GDP however as there was exhaustion of these reserves towards the late 1990's the policies became more inclined towards tourism. This was the main reason for the increase in the contribution of Tourism to the GDP. There has been an increase in the contributions significantly in 2005-2014 mainly because of the Kiribati Development plan 2008-2014. This plan emphasizes tourism as an important component in the development of the country. Kiribati National Tourism Action Plan 2009-2014 introduced new measures with a vision that tourism industry will help Kiribati to achieve sustained growth. These measures have increased the contributions to 20%(Min Jiang) in 2014 however there has been a fall since then. The visitor's arrival in Kiribati have shown a quite irregular trend since it hasn't responded much to Global Financial Crisis of 2009.

Solomon Islands was under Colonized rule of the British and was granted independence in late 1970's. This had created a lot of political tension due to which the tourism as an industry wasn't promoted until the mid-1990's. The constant political and economic rest due to the internal conflicts of people with different ethnic diversity had made Solomon Islands a weak economy. According to WTTC's report of 2006, Tourism as an industry contributed only 9% share of the total GDP. Though it is source of employment the amount of jobs offered were only about 3000(Milne,2005).However there has been a considerable growth in this sector post 2009. In the period of 2008-09 the financial crisis was responsible for the lowered contribution to GDP, though the visitor's arrivals haven't much changed during this period. Solomon Island's Medium Term Development Strategy was introduced during this period to give more incentives for tourism industry to grow which has proved to be very useful as the number of visitors arriving has increased considerably since then.

Tonga's tourism sector is developing rapidly in the recent years. Tonga's tourism sector is a major source of employment and has experienced a boom from 2006 to the current year. Only 4000 were estimated to have been employed (Milne, 2005) in 2005 but the numbers have gradually increased to double the value.According to the SPTO report of WTTC it has grown by almost 5% during the early 2009's that is post the financial crisis situation. There has been a considerable rise in the contributions due to the New Tonga Tourism Authority. This was established lately which promotes tourism and aims at achieving growth by its contribution to GDP. However there still seem to be some problems faced by these countries like the domestic flight issues due to the political conflicts, there have been policies which are strictly regulating the foreign investments resulting in a restricted growth in travel accommodation. However cruise market is booming because of the reforms of 2012 and whale watching industry has considerable increased the value of this industry over time.

Implications of the Regression:

High Adjusted R-squared-94.7% which implies the strong impact of 2 parameters to the Growth in terms of GDP and the rest contributed by the residuals. Only 5.3 % is contributes by the residual and the external factors.

Model significance is explained by High value of the F-test statistic and p value which is considerably less.p-value: 1.683e-07

High Adjusted R-squared-92.11% which implies the strong impact of 2 parameters to the Growth in terms of GDP and the rest contributed by the residuals. Only 7.89 % is contributes by the residual and the external factors. Model significance is explained by High value of the F-test statistic and p value which is considerably less.p-value: 1.227e-06.

Conclusion

India does not have a proper strategy to deal with South Pacific region. India's ethnic-Indian Fiji-focused policy for the South Pacific has been limiting - even counter-productive - for India, both in Fiji and in the wider region. It has given the other PICs the impression that India is mostly focused on ethnic Indians. India's Strategic Imperative in the South Pacific in the region, rather than on true nation-to-nation engagement. China, conversely, has engaged broadly in Fiji, and now is more influential in Fijian policy-making than India. Broad partnerships with the PICs will not only give India more leverage when lobbying on behalf of the diaspora, it will also create wider economic and political benefits for India and the region.

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