



Performance of public and private investment in Fiji

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Since the two military coups in 1987, investment in Fiji has substantially declined. An analysis of the impact of public and private investment on growth in Fiji shows that private investment has played a far more important role than public investment. However, the impact of political instability and government policy on private investment has been negative.

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Over the past three decades Fiji governments have emphasised the role of investment as one of the main factors leading to economic growth. Fiji has tried to promote investment through an export promotion strategy, liberalising financial markets and the banking sector, achieving macroeconomic stability, providing basic infrastructure and education facilities, and promoting foreign direct investment (FDI).

The recent literature advocating an investment-oriented development policy has been predominantly empirical, involving the application of economic growth models. This literature has demonstrated, without exception, a positive association between investment and economic growth. However,

there has been increasing attention to the roles of public and private investment in the growth process in developing countries. Studies have differed in terms of the contributions public and private investment are seen to make to growth in the long-run. The main aim of this paper, therefore, is to examine the role of public and private investment on economic growth in Fiji over the period 1968 to 1998.

The investment-growth relationship is investigated in the following way: first, the impact of public and private investment on growth over the whole period is analysed within the framework of an economic growth model. Second, the impact of investment on growth is measured in the post-coup period



to see how public and private investment and their contribution to economic growth is affected by political instability. Third, policy variables are included to see how policies affect the investment–growth relationships.

The economic strategies followed in Fiji and investment performance are discussed next, followed by a discussion of growth models and specification of the model used in the analysis. The results of the regression analysis are then presented and discussed.

Policy, savings, investment and growth in Fiji

After gaining independence from Britain in 1970, Fiji's annual economic growth rate was 4.8 per cent for the 1970–79 period (Table 1). This strong growth was associated with the structural transformation of the economy: a principal feature of this transformation was the promotion of the manufacturing sector. A major contribution to the development of the manufacturing sector was the relatively high levels of private domestic investment up to 1983. As far as macroeconomic variables were concerned, inflation and interest rates were low, the budget deficit was

under control, and public borrowing as measured by total debt to gross domestic product (GDP) or debt stock to exports was at easily manageable levels.

With agricultural growth fluctuating, Fiji put forward the development of the industrial sector as one of its main growth strategies. High levels of foreign and domestic investment and growth of exports played a significant part in the growth of the manufacturing sector. In the pre-coup period, industrial policies strongly favoured an import substitution strategy. Tariff policies and the tax regime ensured that domestic industries were sufficiently protected.

In the post 1987 coup period, import-substitution policies were replaced by export-led growth strategies. Domestic industries were encouraged to become competitive in international markets. However, private investment has declined sharply in the post 1987 coup period, while public investment has increased. Public sector investment has been focused on development of physical infrastructure (Jayaraman 1998). However, it has been found that generally public investment is competitive rather than complimentary to the private sector in the South Pacific (Jayaraman 1996). Investment

Table 1 Performance of macroeconomic variables, 1970–98 (per cent)

Year	GY	GLAB	GX	TKY	PUKY	PRKY	POLICY
1970–75	6.80	19.93	-5.63	18.84	4.20	14.57	0.03
1976–80	4.20	11.92	10.16	19.91	7.22	12.69	-0.05
1981–85	0.80	-3.83	15.44	19.66	9.35	10.30	-0.08
1986–90	2.0	5.64	3.88	13.76	11.57	7.62	-0.15
1991–94	2.25	7.11	-2.15	12.50	13.60	4.90	-0.20
1995–98	-4.50	7.82	14.52	10.9	8.97	4.22	-0.22

Notes: GY: growth in real GDP; TKY, PUKY, PRKY: total investment, public investment, private investment to GDP ratios, respectively; GLAB and GX: growth rate of effective labour force and exports, respectively; POLICY: an index incorporating inflation, openness and fiscal balance. GLAB and the policy variable are explained in the next section.

Sources: Reserve Bank of Fiji (various): Public Capital Formation, Private Capital Formation, Total Capital Formation; United Nations (various) and World Bank (2000): Students Enrolment at Secondary and Tertiary levels, Gross Domestic Product, Exports, Imports, Consumer Price Index, Labour Force, Population, Fiscal Balance, Inflation Rate.



in Fiji was generally above the average of other developing countries in the South Pacific from 1970 to the mid 1980s, however, its total investment to GDP ratio has declined steadily while in other South Pacific developing countries investment has maintained an average around 20 per cent of GDP.

The impact of the 1987 military coups was felt immediately on economic growth. In response the government introduced various initiatives, in terms of fiscal, monetary and exchange rate policies, to improve the competitiveness of exports and to encourage investors to undertake export-oriented activities (Siwatibau 1993). These measures led to growth in labour-intensive industries, in particular garment industries. Investment in the export-oriented industries was also facilitated by real wage decreases through wage restraint and price rises associated with currency devaluation (Siwatibau 1993, AusAID 1995).

However, the ratio of private investment to GDP continued to decline over the 1991–94 period (see Table 1). It was argued that the decline was caused by perceptions of uncertainty in the political climate, and continuing discussion of constitutional reform (World Bank 1996). As well, failure to resolve the agricultural land lease issue also prolonged the problem of low investment (Economist Intelligence Unit 1998). With a majority of land leases set to expire in the period 1996–2004, this element of uncertainty combined with the possibility that both the export price of sugar and Fiji's preferential market access might decline. The government tried to address the investment issue through streamlining investment procedures and granting tax incentives (Fiji Trade and Investment Board 1996). However, as reflected in the low private investment to GDP ratio in the 1995–98 period, investor confidence did not recover from the coups of 1987.

In the post 1987 coup period, FDI also declined in Fiji. Studies have found that FDI promotes economic growth by stimulating

domestic private fixed investment (Sun 1998, Atukorala and Menon 1995, Jansen 1995). The technology, skills and market networks associated with FDI are regarded as an important ingredient for growth. The scarcity of domestic capital means that most of the island states rely on foreign investment to meet their needs, especially the development of natural resources, tourism, transport and financial services. There has been a shift away from the traditional investment areas of plantation crops. Gounder (2000) found that FDI has a positive impact on growth in Fiji, however its impact on total domestic investment is negative in the long run. This suggests that FDI does not stimulate growth via development of backward and forward linkages. It is difficult to see why FDI should be a substitute for domestic capital and not complementary.

Another effect of the 1987 political instability was the outflow of skilled labour. For example, in 1995, Indo-Fijians accounted for some 90 per cent of the skilled emigrants, while ethnic Fijians and other ethnic groups comprised 6.3 and 3.7 per cent of total emigrants, respectively (Reserve Bank of Fiji, 2000).

In the growth literature, savings is regarded as an important determinant of investment. Fiji's savings rate has been low by developing countries standards. Moreover, total savings are low as a large proportion of the population earns low incomes. The low savings is reflected in poor credit availability and high interest rates. The high interest rates in Fiji limit financial borrowers and thus reduce feasible investment opportunities and potential growth prospects.

Investment–growth models

Studies have found that public and private investment can have a differential impact on economic growth (for example, Khan and Kumar 1997, Ram 1996, Khan and Reinhart 1990). These studies have predominantly



used cross-country regression analysis. Earlier studies applied the neoclassical growth theory associated with Solow (1956) to determine the impact of investment. New, 'endogenous' growth theories have emerged to take into account the fact that labour and capital and other inputs (in the Solow framework) have not been able to fully explain growth in developing countries. The new growth models suggest an active role for public policy (investment in human capital, infrastructure, and research and development) in promoting growth and development (see Barro 1991, Benhabib and Spiegel 1994, Edwards 1998 for a discussion of human capital-growth relationships).

The variables that commonly enter growth models include the annual growth rate in the labour force and the ratio of investment to GDP (that is, capital). As secondary, tertiary, basic vocational and technical graduates are needed to perform technical and administrative functions in the public and private sectors, the data used here measure the proportion of skilled labour in the labour force. As the purpose of the study was to evaluate the separate contributions of public and private investment, these were included as separate variables.

Following common practice, the growth models specified were expanded to account for political instability and policy impacts, the differential impact of public and private investment in the post-coup period, the expansion of exports and the impact of natural disasters such as cyclones and drought as Fiji is prone to such events. This weather effect was included using a dummy variable to account for a cyclone or drought occurring in a particular year. The models estimated took the following forms.

$$\begin{aligned} \dot{Y} = & \beta_0 + \beta_1 \dot{L}_{eff} + \beta_2 (PUKY) + \beta_3 (PRKY) \\ & + \beta_4 \dot{X} + \beta_3 POLICY + \beta_6 MC + \beta_7 CD + \mu_t \end{aligned} \quad (1)$$

$$\begin{aligned} \dot{Y} = & \alpha_0 + \alpha_1 \dot{L}_{eff} + \alpha_2 (PUKY) \\ & + \alpha_3 (PRKY) + \alpha_4 \dot{X} + \alpha_5 POLICY \\ & + \alpha_6 PUKYDV + \alpha_7 PRKYDV + \alpha_8 CD + \mu_{2t} \end{aligned} \quad (2)$$

$$\begin{aligned} \dot{Y} = & \delta_0 + \delta_1 \dot{L}_{eff} + \delta_2 (PUKY) + \delta_3 (PRKY) \\ & + \delta_4 \dot{X} + \delta_5 PPUKY + \delta_6 PPRKY + \delta_7 CD + \mu_{3t} \end{aligned} \quad (3)$$

where \dot{Y} (that is, $\Delta Y/Y_{-1}$) is annual growth rate of real GDP, \dot{L} (that is, $\Delta L/L_{-1}$) is the annual growth rate of the effective labour force, \dot{X} (that is, $\Delta X/X_{-1}$) is the annual growth rate of exports, PUKY is the public investment to output ratio, PRKY is the private investment to output ratio, MC is a military coup dummy variable with value of 1 for years 1987 to 1998 and zero otherwise, CD is the cyclone/drought dummy with value of 1 for the year of cyclone/drought and zero otherwise, POLICY is an index that incorporates inflation, openness and fiscal balance, PUKYDV and PRKYDV are interaction terms that allow for the impact of the coups on public and private investment, respectively, PPUKY and PPRKY are interactive terms that allow for the effects of changes in policy and public and private investment, respectively, and $\mu_{1t}, \dots, \mu_{nt}$ are the random error terms assumed to have zero means and variance-covariance matrices of the form $\sigma_1^2 I_{n, \dots, \sigma_n^2 I_n$.

Total investment is disaggregated into public and private investment shares, expressed as ratios to GDP (PUKY, PRKY) that measure the marginal productivity of each sector, and approximates the rate of return to these components. The impact of Fiji's 1987 military coups is measured using a dummy variable (MC). The impact of policy on investment and growth is measured by creating a policy index (POLICY) that incorporates inflation, openness and fiscal balance. The effect of the coups on public and private investment through interaction terms (PUKYDV and PRKYDV) is also included as



Table 2 Fiji's growth models: investment, policy and other impacts, 1968–98

Equation A

$$\dot{Y} = -0.19 - 0.36 \dot{Y}_{t-1} + 0.17 \Delta \dot{L}_{\text{eff}t} + 0.47 \Delta \text{PUKY}_t + 1.32 \Delta \text{PRKY}_t + 0.007 \Delta \dot{X}_t - 0.005 \dot{X}_{t-1} + 1.87 \Delta \text{POLICY}_t - 0.02 \Delta \text{MC}_{t-1} - 0.01 \Delta \text{CD}_t$$

(2.73) † (2.67) † (2.14) § (1.99) § (2.81) † (0.21) (1.72) § (2.46) † (1.83) § (0.08)

$$\bar{R}^2 = 0.61 \quad F_{(10,17)} = 5.65 \ddagger \quad \text{SEE} = 0.03 \quad h = 0.91 \quad \text{LM}\chi^2(1) = 2.51 \quad \text{Reset } \chi^2(1) = 1.68 \quad \text{JBN}\chi^2(2) = 0.81 \quad \text{ARCH}\chi^2(1) = 1.52$$

Long-run coefficients

$$\dot{Y} = 0.12 \dot{L}_{\text{eff}} + 0.34 \text{PUKY} + 0.96 \text{PRKY} - 0.004 \dot{X} + 1.36 \text{POLICY} - 0.02 \text{MC} - 0.01 \text{CD}$$

(2.03) † (1.94) § (3.07) † (1.21) (2.48) † (1.68) § (0.35)

ECM and short-run coefficients

$$\dot{Y} = 0.17 \Delta \dot{L}_{\text{eff}} + 0.47 \Delta \text{PUKY} + 1.32 \Delta \text{PRKY} - 0.007 \Delta \dot{X} + 1.86 \Delta \text{POLICY} - 0.02 \Delta \text{MC} - 0.01 \Delta \text{CD} - 0.36 \text{ECM}_{(t-1)}$$

(2.15) † (2.00) § (2.82) † (0.21) (2.24) † (1.68) § (0.35) (9.31) †

Equation B

$$\dot{Y} = -0.22 - 0.57 \dot{Y}_{t-1} + 0.02 \Delta \dot{L}_{\text{eff}t} - 0.31 \Delta \text{PUKY}_t + 0.56 \text{PUKY}_{t-1} + 2.25 \Delta \text{PRKY}_t + 0.005 \Delta \dot{X}_t + 1.26 \Delta \text{PUKDV}_t - 1.14 \Delta \text{PRKDV}_t - 0.03 \Delta \text{CD}_t$$

(3.27) † (3.94) † (0.72) (0.93) (1.94) § (4.43) † (1.59) (2.59) † (2.10) † (2.23) †

$$\bar{R}^2 = 0.68 \quad F_{(10,17)} = 7.26 \ddagger \quad \text{SEE} = 0.02 \quad h = -0.43 \quad \text{LM}\chi^2(1) = 0.47 \quad \text{Reset } \chi^2(1) = 0.49 \quad \text{JBN}\chi^2(2) = 1.76 \quad \text{ARCH}\chi^2(1) = 0.68$$

Long-run coefficients

$$\dot{Y} = 0.02 \dot{L}_{\text{eff}} + 0.16 \text{PUKY} + 1.42 \text{PRKY} + 0.003 \dot{X} + 0.79 \text{PUKYDV} - 0.68 \text{PRKYDV} - 0.02 \text{CD}$$

(0.26) (0.68) (5.48) † (1.62) (2.89) † (2.17) † (2.14) †

ECM and short-run coefficients

$$\dot{Y} = 0.02 \Delta \dot{L}_{\text{eff}} - 0.31 \Delta \text{PUKY} + 2.25 \Delta \text{PRKY} + 0.005 \Delta \dot{X} + 1.25 \Delta \text{PUKYDV} - 1.18 \Delta \text{PRKYDV} - 0.02 \Delta \text{CD} - 56 \text{ECM}_{(t-1)}$$

(0.28) (0.93) (4.42) † (1.60) (2.59) † (2.10) † (2.23) † (9.74) †

Equation C

$$\dot{Y} = -0.23 - 0.49 \dot{Y}_{t-1} + 0.13 \Delta \dot{L}_{\text{eff}t} - 0.20 \Delta \text{PUKY}_t + 0.57 \text{PUKY}_{t-1} + 1.99 \Delta \text{PRKY}_t + 0.009 \Delta \dot{X}_t + 16.85 \Delta \text{PPUKY}_t - 3.20 \Delta \text{PPUKY}_{t-1} - 0.03 \text{CD}_t$$

(4.08) † (3.58) † (1.79) § (0.61) (1.91) § (4.24) † (0.32) (2.03) † (0.45) (2.57) †

$$\bar{R}^2 = 0.64 \quad F_{(9,18)} = 6.43 \ddagger \quad \text{SEE} = 0.03 \quad h = -0.41 \quad \text{LM}\chi^2(1) = 0.71 \quad \text{Reset } \chi^2(1) = 0.04 \quad \text{JBN}\chi^2(2) = 0.16 \quad \text{ARCH}\chi^2(1) = 2.44$$

Long-run coefficients

$$\dot{Y} = 0.09 \dot{L}_{\text{eff}} + 0.24 \text{PUKY} + 1.33 \text{PRKY} + 0.006 \dot{X} + 11.29 \text{PPUKY} - 2.14 \text{PPRKY} - 0.02 \text{CD}$$

(1.72) § (0.98) (4.80) † (0.32) (2.15) † (0.45) (2.50) †

ECM and short-run coefficients

$$\dot{Y} = 0.13 \Delta \dot{L}_{\text{eff}} - 0.20 \Delta \text{PUKY} + 2.00 \Delta \text{PRKY} + 0.009 \Delta \dot{X} + 16.85 \Delta \text{PPUKY} - 3.20 \Delta \text{PPRKY} - 0.03 \Delta \text{CD} - 0.49 \text{ECM}_{(t-1)}$$

(1.79) § (0.60) (4.22) † (0.32) (2.02) † (0.45) (2.57) † (9.31) †

Notes: †, ‡ and § show significance at the one, five and ten per cent level, respectively. t ratios are given in brackets. Critical values for the various tests are: $\chi^2(1) = 6.63$, $\chi^2(2) = 9.21$. The test statistics are as follows: LM = Lagrange multiplier test for serial correlation; RESET = Ramsey test for functional form; JBN = Jarque-Bera test for the normality of the residuals; ARCH = Engle's autoregressive conditional heteroscedasticity test.



is the impact of policy on public and private investment (PPUKY and PPRKY).

The signs of the estimated coefficients are expected to be positive except for the coefficients estimated with dummy variables, that is, the impacts of military coups and cyclones are expected to be negative, while the impact of policy on investment is an open question. The estimation of the equations utilises the Autoregressive Distributed Lag (ARDL) approach to cointegration. Under the ARDL method, the long-run relationship being investigated is embedded within a sufficiently complex dynamic specification, including the lagged dependent and independent variables. The equations were estimated for the period 1968 to 1998. All relevant data are in constant prices. As a first step, an F statistic was computed to examine the existence of a stable, long-run relationship. The computed F statistic for each model fell outside the band of critical values, thus the null hypothesis of no long-run relationship can be rejected.

Regression results: Fiji's investment-growth nexus

The results from the estimation of the three growth models in terms of direct and indirect effects of factor inputs and productivities are reported in Table 2, along with commonly-used diagnostic statistics. Overall, the equations have a relatively high explanatory power in terms of adjusted R^2 , and the F statistics are significant at the one per cent level. Some comments on each of the coefficients estimated and their impact on economic growth are made below.

Regarding Equation A, as indicated by the estimated value of the adjusted R^2 , the model explains 61 per cent of the variation in economic growth. All coefficients have the expected sign, except for exports, and are statistically significant at least at the 10 per cent level. The coefficient on the short-run

effective labour force (\dot{L}_{eff}), the private investment ratio (PRKY), the public investment ratio (PUKY) and policy (POLICY) are positive and significant, that is, in the long run the effective labour force, public and private investment and policy contribute to growth. The export (\dot{X}) coefficient is negative, both in the short-run and long-run. This result may arise because the policy variable incorporates the ratio of exports and imports to GDP as a measure of openness, which gives rise to correlation between the exports and policy variables. However, Equations B and C do not include the policy variable and in these equations the coefficient on exports is positive but insignificant. Thus, it could be said that exports generally have not contributed significantly to growth.

The significance of the policy variable indicates that Fiji has generally adopted policies that benefit long-run growth. Also, these benefits from private investment are higher than the benefits from investment by public sector. The dummy variable that measures the impact of coups (MC) is negative and statistically significant, showing that political instability has an adverse effect on growth. The cyclone-drought dummy variable (CD) is also negative and statistically significant, indicating that natural disasters have a detrimental impact on growth. The size of the MC coefficient is larger than the CD coefficient, which suggests that the decline in growth due to military coups is significantly higher than that due to devastating tropical cyclones and drought.

The coefficients of the short-run public investment ratio (PUKY) and the private investment ratio (PRKY) are both positive and statistically significant. In the long-run both PUKY and PRKY contribute positively to growth: however, the private investment contribution is substantially larger than that of public investment. But the results show that the contribution of private investment



to growth has declined over the long-run, i.e., the PRKY coefficient declines from 1.32 to 0.96. The public investment coefficient has also declined, from 0.47 to 0.34, but this is because public investment was increased sharply in the immediate post-coup period. Generally, the government's investment share of GDP was very low in the pre-coup period (see Table 1).

While both private and public investment have a positive impact in the long-run, their magnitude differs considerably. The magnitude of the contribution of private investment is larger both in the short and long-run. Although PRKY declined substantially in the post-coup period, its contribution to growth has still been substantial. The estimated PRKY coefficient suggests that a one percentage point increase in the ratio of private investment to GDP is associated with an increase in GDP of almost one percentage point. On the other hand, a one percentage point increase in PUKY indicates only a one-third percentage point increase in GDP.

The results of Equation A provide evidence that both private and public components of investment contribute to growth, that policy has been growth-promoting, while the coups of 1987 and natural disasters have adversely affected growth. However, as military coups create uncertainty, it is important to see how the increased uncertainty has indirectly affected growth by affecting investment. This impact is measured by including interactive terms: the impact of political instability on public investment (PUKYDV), and the impact of political instability on private investment (PRKYDV). The results are provided in Equation B (Table 2). The equation performs satisfactorily in terms of conventional tests and the diagnostics. The coefficient on the interactive term PUKYDV is positive and significant while the PRKYDV coefficient is negative and significant. Thus, we see a differential effect of political instability on

public and private investment in the post-coup period. The Government's response was to increase public investment in the post-coup period and this also shows up in the positive and significant coefficient on PUKYDV. However, the coefficient estimated on PUKY though positive is not significant in the long-run. In other words, while the affect-effect of coups was to increase public investment, this increased public investment did not contribute to growth.

The estimated PRKYDV coefficient is negative and significant, indicating that the increased political instability adversely affected growth. This helps to explain why private investment declined in the long-run. The estimated value of the PRKYDV coefficient indicates that GDP declined by almost one percentage point as a result of the coups. The large negative impact of PRKYDV also implies that the observed independent adverse effects of political instability on economic growth may have worked through the adverse effects on private investment productivity in Fiji. Even though private investment productivity declined in the post-coup period from 2.25 to 1.42, the marginal productivity of this factor of production is still positive.

In Equation B, labour productivity is low (0.02) and the coefficient is not significant. The low productivity of this factor also suggests the adverse impact of the coups on labour, no doubt due to uncertainty in the investment sector, leading to higher unemployment and the low growth of the economy. The political turmoil in Fiji caused the emigration of skilled manpower and in the long run that must also affect labour productivity in the domestic and foreign investment sectors. The coefficient on exports in Equation B is positive but insignificant. Cyclones and droughts again show an adverse effect on growth.

Expanding the model to measure the impact of policy on public and private investment on growth leads to Equation C.



To measure whether policy had a differential impact on public and private investment, the interactive policy-public investment variable (PPUKY) and policy-private investment variable (PPRKY) were created. The expanded model explains 64 per cent of the variation in economic growth in Fiji. As expected, the estimated PPUKY coefficient is positive and statistically significant at the one per cent level, which suggests that policy favours public investment and the impact on growth is positive. However, the policy-private investment nexus is negative. This result is not surprising seeing that private investment declined over time and the policy environment (in terms of inflation, openness and fiscal balance) has not been conducive for private investment. The estimated public investment ratio (PUKY) coefficient though positive is not significant in the long-run even though the policy environment is good for public investment. The private investment ratio (PRKY) coefficient remains positive and significant. Also the size of the estimated PRKY coefficient is larger than that for the PUKY coefficient, although the magnitude declined over the long run from 2.00 to 1.33.

Discussion and conclusions

The results show that private investment has a larger impact on growth than public investment and consistently contributes to growth in both the short-run and long-run. This result holds for private investment under various specifications of conditioning factors such as policy, the impact of military coups, and the impact of natural disasters. The positive sign of the public investment coefficient suggest that to some extent public investment plays a complementary role to the private sector. Political instability has an adverse effect on the economy, both directly and indirectly through its impact on private investment. The productivity of the educated

labour force, public and private investment, and exports declined in all equations under different sets of conditioning factors as well. Thus, total factor productivity has been adversely affected in Fiji.

In the post 1987 coup period, Fiji moved from supporting substitution policies to a more open-economy implementing export-promotion policies. The significance of the policy variable indicates that Fiji has adopted good policies, and these benefits are higher if the investment is undertaken by private sector rather than by the public sector. However, the military coups created uncertainty and political instability that adversely affected private investment and growth.

The direct effect of the interaction between political instability and public investment shows that public investment increased in the post-coup period as a result of the coups, however the coefficient of public investment is not significant. The interaction between political instability and private investment has a negative impact on growth, and this impact is large. Private investment declined as the result of the coups, and the long-run coefficient estimated indicates a reduction in the marginal productivity of this factor of production.

Since political stability, low risks for investment and higher rates of return, are some of the pre-conditions for high rates of investment, the coups obviously adversely impacted on the contribution of investment to growth. Policymakers need to work towards a stable macroeconomic environment for investment and develop strategies to create a climate favourable to investment. Skilled labour has contracted since the increase in political instability and the productivity of skilled labour has declined. With the high rates of emigration experienced, this should not be a surprise. The level and productivity of domestic and foreign investment must also be adversely affected by the decline in skilled labour.



Expansion of the model to measure the impact of policy on public and private investment and in turn on growth shows the differential policy impact on public and private investment. The policy-public investment coefficient is positive, and thus policy has not affected public investment. As for the policy-private investment nexus, it shows a negative impact. This result should be of crucial concern for policymakers. It obviously takes time to convince potential investors of a shift towards policies more consistent with political and economic freedom. However, with the political crises of May 2000 it will not be an easy task to rekindle growth, even if the right measures are taken to the deteriorating law and order, property rights, policies and democratic principles.

Notes

- ¹ The majority of the emigrants after the 1987 coups were professional and technical workers consisting of architects, accountants, teachers, medical workers, transport workers, clerical and supervisors, administrative and managerial workers, sales personnel, agriculture, animal husbandry and forestry workers, and fishermen.
- ² Effective labour force is measured by the proportion of students enrolled in the secondary and tertiary levels to the proportion of labour force in relation to the population.
- ³ The policy variable is constructed by regressing inflation (INFL), openness of the economy (OPEN) which is the ratio of exports and imports to GDP, and FISCAL balance which is overall budget deficit, including grants as a ratio of GDP. The results to construct the POLICY index is as follows:

$$GY = -0.0229 \cdot INFL + 0.047 \cdot OPEN - 0.001 \cdot FISCAL$$

(1.99)
(2.02)
(0.35)

with Adj. $R^2 = 0.41$, SEE = 0.03 and the number of observations = 31.
- ⁴ Chand's (2000) comparison of the impact of coups and cyclones on Fiji's growth gives similar results.

- ⁵ The share of private investment to GDP is very low and deteriorated in the late 1990s. Fiji's May 2000 coup will further lower the share of private investment as indicated by the closure of various small businesses and factories.

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