

Coups, cyclones and recovery: the Fiji experience

Satish Chand

Fiji has in recent years suffered considerable disasters, both natural and man-made. Here we estimate the immediate impact of these disasters on the level and rate of growth of GDP. Our regression estimates using annual data from 1970 to 2000 suggest that coups, on average, reduce per capita output for the subsequent calendar year by 14 per cent. Natural disasters, in contrast, lower output on average by 3 per cent only. The impact on investment of the two forms of disasters are a lot starker; while coups on average reduce per capita investments for the calendar year by 40 per cent, natural disasters tend to boost investment. This difference in impact on investment has long-run consequences for growth of output and economic recovery. Policy has a significant role to play in ameliorating some of the adverse consequences of man-made disasters.

Satish Chand is a Fellow in the National Centre for Development Studies, Asia Pacific School of Economics and Management and Division of Economics, Research School of Pacific and Asian Studies at The Australian National University.

Fiji bounces back quickly from natural catastrophes but the same cannot be claimed for recovery from man-made disasters, as the coups of the recent past have demonstrated. The reason for this difference can be attributed to the difference in damage done to social capital; while natural disasters cause large losses to physical capital, they leave social capital in terms of security of property rights, respect for law and order, and the spirit of cooperativeness and survival intact. In fact, people may be drawn to working more closely together following a

natural disaster. In contrast, coups and violence of the nature experienced in the aftermath of the coup of 19 May 2000 greatly depletes social capital, making the recovery process a lot more difficult and prolonged. Policymakers, in sharp contrast to their effectiveness in the wake of natural disasters, have a critical role in both preventing such artificial crises and in the recovery process after them.

Prior to the catastrophic events of the recent dark days in Fiji's history, one could not have helped but been up-beat about



prospects for the economy. Investments were trending up, interest rates were at an all time low, and budget deficits and inflation were under control. These were favourable signals for future prosperity—a sharp contrast to the record since 1970. Per capita GDP grew at approximately 1 per cent annually for two decades after independence from the United Kingdom in 1970. At the time of the first coup in 1987, Fijian per capita GDP was merely 21 per cent higher than in 1970. The switch to an export-led growth strategy after the coups of 1987 boosted growth marginally, but political instability and loss of human and financial capital since has kept investment subdued. These factors in turn have prevented the economy from reaping the full benefits of the policy change. In the interim, poverty, income disparity, crime and ethnic polarity have all worsened.

Several studies have pointed to the poor management of the economy as the principal reason for this poor performance. Simple comparisons of Fiji's performance with similar countries such as Malta and Mauritius dispel several of the espoused reasons for Fiji's poor economic record (Table 1). An importled industrialisation strategy had failed miserably; protection of several industries had created strong vested interests that made winding back (most) of the concessions politically impossible; and further concessions and subsidies were being provided to pacify growing resentments among vocal and well-organised lobbies.

Political power for the major part of the post-independence period rested with a small privileged group. The loss of power by this élite group in 1987 is alleged to have been the principal reason for the first coup. This same theory is being espoused this time as well. Testing this theory could be premature given the paucity of information, but it could be a fruitful area of future research. Here, we concentrate on the economic costs of the current turmoil in this otherwise island paradise.

Pre coup facts—an economy steaming ahead

Prior to the most recent coup, Fiji's macroeconomic fundamentals looked healthy. Inflation was hovering around zero; interest rates were at an historical low; the budget deficit was falling with a pre coup forecast for 2000 of 1.3 per cent of GDP; and the national debt was on the ebb from figures around 50 per cent of GDP to forecasts of less than 40 per cent for the year 2000. Output for 1999 grew by a record 6.9 per cent and the forecast for 2000 was a rise of another 4 per cent. Investment was trending up with investment projects totalling in excess of US\$300 million being approved for the calendar year. Performance in the key sectors was also buoyant.

Steady rain the previous year had contributed to a bumper sugarcane crop for 2000 with forecasts of sugarcane production

Table 1 Basic comparative statistics on Fiji, Malta and Mauritius

	Per capita GDP (1970)	Per capita GDP (1996)	Annual growth (1970–96)
Fiji	1,309	1,937	1.0
Malta	1,666	7,126 ^a	4.3
Mauritius	851	2,641	4.3

Notes: Values are in 1987 US\$. ^a Figure for 1995, the latest available.

Source: Data provided by the International Economic Databank, The Australian National University,

Canberra.



exceeding 4 million tonnes for the year. Garment-sector activity was at a peak with garment exports amounting to one-third of total merchandise exports the previous year and an expectation that this record would be broken in 2000, given the demands generated by the Sydney Olympics.

The tourism industry was showing strong signs of an upturn with some US\$160 million of investment projects being approved for the sector. The country was due to surpass the 400,000 threshold for tourist arrivals this year, an achievable target given the positive spillovers from the Sydney Olympics and Fiji's hosting of the post-Lomé meeting. Total tourist numbers were to be envied, given that not too many nations can boast annually hosting visitors amounting to nearly half the nation's population. Obviously Fiji deserves this prominence given its natural beauty, the (past) hospitality of its people, and the presence of infrastructure to support such a large and growing industry.

Despite the healthy state of the economy, all was not well as we subsequently discovered. Perhaps, the good economic situation was masking the political storm brewing underneath that surfaced on 19 May throwing the economy into a spin from which the giddiness will last a long while yet. Fiji has weathered several damaging storms and tropical cyclones in recent decades with its people having become adept at bouncing back quickly from natural catastrophes; but the same people have yet to learn to react similarly to man-made disasters. It will take a huge collective effort to put the economy back on track and time is running out.

Post-coup realities—wheels in the sand

The post-coup economic realities are grim, with several indicators suggesting there is a difficult task ahead to stop the economy from falling into a deep recession. The law and order situation is precarious, property rights

remain to be secured, and the community is bracing itself for further instability.

Macroeconomic management in this difficult period is a considerable challenge. Budget deficits will rise as a result of the falls in revenue and increases in some outlays. On the revenue side, income tax collections will fall as a result of increased unemployment and falling profitability of the corporate sector. Indirect taxes (VAT) will also decline as households and business hold back spending, and excise collections will fall as imports drop. On outlays, several new initiatives in the mini-budget designed to pacify vocal lobbies will make it difficult to contain the budget deficit from approaching high single digits as a proportion of GDP. The concessions afforded will in all likelihood generate further demands for budgetary support. These will add further pressure to a burgeoning public-sector debt that now stands at approximately 50 per cent of GDP, thereby raising inflation and interest rates.

Despite the contractionary effects at work, prices are forecast to rise due to a sharp drop in supply. An inflation rate of anything up to 7 per cent may materialise; this will reduce the spending power of any accumulated savings and exacerbate the welfare effects of the wage reductions. The higher inflation coupled with the downgrading of Fiji's credit rating by international agencies will put upward pressure on domestic interest rates. Should these rates rise—a definite possibility if the currency is devalued—some businesses will be driven to the wall. If the effects are large enough, we could see a liquidity and foreign exchange crisis.

Some preliminary forecasts suggest GDP falling by 15 per cent over the next 12 months, the budget deficit blowing out to something close to 5 per cent of GDP, and investments grinding to a halt. The bumper sugarcane crop would enable the country to meet its quota in the preferential markets but threats of harvest-boycotts will make it unlikely that the entire crop will reach the mills by the end of the season. Tourist arrivals are likely to



fall by anything up to 50 per cent from the pre coup forecasts, the impact of such falls on the industry and the wider economy are likely to be severe.

Australia, Japan, New Zealand, the United Kingdom and the United States, who collectively account for approximately 90 per cent of tourists visiting Fiji, warned their nationals against visiting the country. This

is unlikely to stem all flows from these countries given the goodwill of return visitors that Fiji enjoys, but it will dampen the number of first-time arrivals. This is indeed unfortunate given the flow of tourists to the Sydney Olympics that could have benefited Fiji greatly in terms of new arrivals. Air New Zealand has decided to overfly Fiji on its trans-Pacific flights to the Americas;

Table 2 Fiji: income and disaster data, 1970–2000

Year	Per capita GDP (US\$ 1987)	Growth of per capita GDP	Investment (per cent of GDP)	Natural disaster
1970	1,309	10.96	22.15	
1971	1,371	4.75	24.82	
1972	1,455	6.15	23.95	Cyclone Bebe
1973	1,631	12.02	22.22	•
1974	1,664	2.08	18.91	
1975	1,629	-2.13	20.62	
1976	1,644	0.94	21.49	
1977	1,712	4.13	23.17	
1978	1,727	0.89	22.77	
1979	1,873	8.44	30.14	
1980	1,799	-3.96	31.83	
1981	1,894	5.24	34.29	
1982	1,747	-7.72	25.55	Drought
1983	1,634	-6.46	21.14	Cyclones ENOGH
1984	1,742	6.58	18.91	•
1985	1,635	-6.14	19.07	
1986	1,729	5.71	18.20	
1987	1,594	-7.79	15.92	Two coups
1988	1,606	0.77	14.86	_
1989	1,796	11.83	13.75	
1990	1,872	4.21	17.45	
1991	1,867	-0.29	13.55	
1992	1,883	0.89	13.27	
1993	1,882	-0.065	15.11	
1994	1,911	1.56	13.84	
1995	1,903	-0.43	14.29	
1996	1,937	1.77	••	
1997ª	1,904	-1.70	••	Drought
1998ª	1,917	0.70	••	<u> </u>
1999ª	2,029	5.80	••	
2000^{e}	1,724	-15.00	8.00	Coup

Notes: a Computed on basis of growth

Source: World Bank Tables 2000, International Economic Databank, The Australian National University, Canberra.

^e Estimate (forecasts from Reserve Bank of Fiji, 2000)



this will add to the problems faced by the tourism industry. The longer-term effects could be a lot more serious given the hostage crises created at tourist resorts and with Fiji Air being caught up in the turmoil. The latter will act as a serious disincentive to long-term investment in the industry.

Total paid employment of around 100,000 is likely to fall by anything up to 20 per cent. Given the absence of a social security net and an age dependency ratio in excess of 60 per cent, this fall will translate into increased poverty and unemploymentrelated crime.² The migration of people in their productive period is likely to raise the dependency ratios; this being most significant for the Indo-Fijian population. The coups of 1987 saw the elderly being stranded in the country after their younger and more able family members left the country. Some of the elderly who either accompanied their migrating children or joined them subsequently have had considerable difficulty in assimilating in their new homeland. There are reports of sudden deaths and some return migration from this cohort to 'die in peace in their homeland'. These social displacements and ensuing pains are likely to be exacerbated by the recent coups.

Official statistics show an annual emigration rate of around 5,000, with the corresponding figure prior to the coups around 3,000. Assuming a post-migration lifespan of 30 years, these statistics suggest a foreign Fiji-born population of around 120,000. This may be a conservative figure due to the assumption on post-migration life span and some under-reporting of migration statistics. There have been suggestions that another spike in migration numbers would be observed this time around. This is unlikely given the serious depletion of stocks of potential migrants post-1987, unless receiving countries lower their hurdles for Fiji migrants.

Quantifying the impacts of disasters, natural and man-made

Annual data since independence has been collected on per capita output, investment, and dummy-variables taking the value of one when a disaster has taken place and zero otherwise (see Table 2). The disasters that the economy has faced are separated out as those resulting from artificial events, principally the coups, and those resulting from natural causes such as cyclones and droughts. In order to differentiate the impact of each form of disaster on output and investment, a simple log-linear regression model of the form

$$\ln(y) = \alpha_0 + \beta t + \gamma C + \delta N + \nu \tag{1}$$

has been estimated. The natural logarithm of the dependent variable (output and investment) has been taken to account for nonlinearity in the data, while any time trend in output and investment has been removed through incorporation of *t* as an explanatory variable. *C* and *N*, being dummy variables, denote coups and natural disasters.

The regression estimates are reported in Table 3. For the first model where the dependent variable is the natural logarithm of per capita output, the point estimate of β of 0.009 suggests that after controlling for both man-made and natural disasters, per capita output in the country has grown by an average of approximately 1 per cent annually for the last 30 years. The point estimate of γ of -0.136 suggest that per capita output falls by 14 per cent over the 12-month period as a result of a coup. Natural disasters result in a fall of GDP of 3 per cent, but this figure is not statistically different from zero as suggested by the large p-value for the statistic. We can re-estimate the above model in a different form such that the dependent variable is now the growth rate of per capita GDP. The estimates from this model, reported in column 3 of Table 3, show the growth effect of coups and natural disasters. These results



are comparable to those reported from the level estimates. For an economy that has been growing at less than 1 per cent annually, a coup could eradicate some 13 years of growth. Two coups in a span of 30 years could push the per capita income back to its initial point, eradicating all progress made since independence. The implications of these for the welfare of the population are extreme.

The longer-term effects of disasters on growth can be gauged by assessing their impact on investment. We re-estimate the model given in Equation 1 with the dependent variable now being the natural logarithm of per capita investment. The parameter estimates suggest that coups result in a 40 per cent fall in per capita investment in the calendar year of the disaster. Natural disasters, by contrast, have a positive but statistically insignificant impact on investment. Given the critical role of investment on growth, the damage coups do to investment is likely to have long-term adverse effects on growth.

Investments are endogenous and hence the outcome of the economic climate in the nation. The environment for economic activity including the broad macroeconomic climate in terms of inflation and interest rates, and the institutional structure including security of person and property rights, have in general been favourable in the recent past. Even during the two coups of 1987, personal freedom and security were not violated to the extent that they were this time around. Unless policymakers are able to create a stable economic environment for investment, the adverse effects of the recent coup on investment could be a lot worse than those provided by the estimates reported in Table 3. We next consider the role of policy in repairing some of the damage done to date from the events of 19 May 2000.

Long-term effects

The long-term effects of the coups are likely to be larger and the role of policymakers in

Table 3	Regression results of impact of coups and natural disasters

Dependent variable	LOG (per capita income)	LOG (investment per capita)	Growth in per capita income
	Model 1	Model 2	Model 3
Constant	7.32 (0.000)	10.65 (0.000)	2.87 (0.006)
Time	0.009 (0.000)	0.0166 -(0.017)	-
Coup	-0.136 (0.008)	0.404 -(0.050)	-14.26 (0.000)
Natural disaster	-0.033 (0.341)	0.057 (0.716)	-5.54 (0.075)
Adjusted R ²	0.62	0.37	0.35
Root MSE	0.063	0.248	4.91
Number of observations	31	27	31

Notes: *P*-values given in parentheses.

Source: Author's calculations.



stabilising output in the short term and rekindling growth over the longer horizon a lot more significant. The three pillars of society, namely, the legislature, the judiciary, and the executive have all been severely compromised in the aftermath of the coup. These institutions collectively form the foundations of civil order and provide the checks and balances necessary in ensuring good governance that in turn is necessary for wealth creation. The recent events in Fiji have damaged each of these institutions to such an extent that it will require considerable effort and time to regain lost ground.

The kidnapping and unlawful imprisonment of the legislature for an inordinately long period of time under full media glare has done considerable damage to the credibility of this institution. If carried through, the grant of amnesty to those responsible for this damage will not help in re-establishing this credibility in the short to medium term. The revolving-door experience with government over the recent past, together with the ensuing violence in keeping this door revolving, will make it difficult to convince the youth of today that parliaments are sacrosanct and beyond the realm of violence and vandalism. The currently appointed regime does not have a mandate from those that they purport to govern and yet appropriation bills in the form of a minibudget have been released. This could raise questions by taxpayers over the legality of such appropriations. The legitimacy of the government is already being challenged in the courts. All of the above add to the damage done to the credibility of the legislature damage that has to be repaired as an immediate priority. Even when a legitimate legislature is put in place, the events of the recent past will continue to haunt the institution for some time.

In the past, including during the coups of 1987, the judiciary remained impartial with their integrity intact. This time around, questions are being raised over the role of senior members of the bench in the events following the coup. To make matters worse, constituents of the judiciary itself are raising these questions. The local law fraternity has been in the forefront of these debates. The resignation of some expatriate members of the bench has added credence to the debates.

The executive has also had its credibility damaged severely. The loyalty of the police and military forces to their heads and the legislature came under repeated questioning throughout the crisis. Doubts are being raised about the involvement of these forces in the planning and execution of the 19 May coup; these, as yet, remain interesting questions for further investigation. Some elements of the public service, including the foreign diplomatic corps, are also being investigated as to their role in the current political crisis. To the credit of the remainder and the bulk of the civil service, some semblance of government was maintained during the siege. The Reserve Bank of Fiji and the Ministry of Finance deserve particular mention for their efforts and success in maintaining foreign reserves and ensuring that government finances were responsibly managed during and immediately after the crisis.

Returning the above institutions to their previous healthy state will take time and considerable effort, but unless this happens law and order and good governance cannot be assured. Failure to create the necessary social infrastructure, particularly trust, will hamper investment and wealth creation. The failure of the economy to grow will exacerbate poverty and increase unemployment-related crime. There is a significant risk of the economy getting caught in a whirlwind of rising unemployment from falling investment, leading to rising crime and hence further falls in investment. Policymakers have a huge role to play in preventing the economy from getting caught in such a 'cyclone'.

The damage done to date to social capital will have long-term consequences, some of



which may be difficult to quantify but are no less important. For example, the psychological costs to the general population from the deterioration of law and order are likely to be high. Investment seems to have fallen dramatically after each coup; the drop this time is predicted to be the largest to an historical low of 8 per cent of GDP (see Table 2). Should growth in output over the next ten years decline by 3.5 per cent annually as a direct consequence of the recent coups, income levels will be 41 per cent lower than they otherwise would have been by 2010. This in turn would mean the difference between having a few extra years of life for the current retirees; having a job versus being unemployed for many of the current generation of school students; and having access to schooling and health care as against missing out on these provisions for some of the very young of today.

Immediate challenges for policymakers

Of the many unknowns, several are within the control of policymakers. The extent to which the law and order situation deteriorates further is within the purview of the police, military and the courts. Fortunately, some lost ground has been recovered through the arrest of several of the looters and perpetrators of related crimes.

The extent of political uncertainty can be minimised through swift action on the part of the interim regime. Acceptance of a political regime consistent with the historical norms of the country and one acceptable to the international community would stem the falling confidence in the process of governance.

The process of economic stabilisation has been started with the incorporation of several measures in the budget but undue pressure on interest rates through rising budget deficits and government debt would further dampen investment and probably drive many businesses to the wall. If this happens to a large enough extent, we could witness a banking crisis of a lot larger magnitude than that experienced with the National Bank of Fiji some years back.

Fiji may be a group of islands in a relatively isolated part of the Pacific Ocean, but it is not divorced from international commerce. Exports and imports collectively amount to more than total GDP. If Fiji is to continue to grow, it is crucial for it to regain international support. Exports form a large part of domestic output, tourism remains a key industry, and foreign direct investment forms the key to several of the growth industries in the domestic economy. Capital controls would need to be relaxed to entice foreign investors back into the economy, and property rights would have to be secured to encourage investment—particularly in projects having long gestation lags and those with significant value-adding and growth potential. Otherwise, foot-loose investment will continue to dominate and resource exploitation at unsustainable levels may be encouraged.

The challenge to contain capital (human and physical) flight will remain a considerable challenge for the policymakers. The country has been losing skilled labour at high rates for more than a decade now. It is surprising that in spite of the brain drain, acute labour shortages have been alleviated in the recent past, but the risk of this problem arising in the near term has increased significantly after the most recent coup. Press reports of an exodus of 200 doctors cannot be taken lightly given the small population and the necessity of such capacity across the country. The presence of local capacity is a strong factor in attracting investment, hence the current migration trends of skilled labour is not a healthy signal for future investment and growth.

Policymakers face a difficult challenge in restoring confidence in the governance



process. But such challenges often bring to the fore the will and determination the nation needs in its rebuilding—one hopes this will materialise soon.

Conclusion

Fijians have learnt to cope with natural disasters having faced several devastating tropical cyclones, withstood long droughts, and survived the occasional flood and earthquake. Their ability to rebound from such calamities is breathtaking. It is the result of the buoyant Fijian spirit, a spirit of cooperativeness within the population, and the strength of the fabric of society that these calamities fail to inflict lasting damage despite colossal losses to life and property. The difference in response to man-made disasters could not be starker. Post-mortems of the economic effects of the coups suggest that the ensuing damage is a lot worse and of a longer-term than that from natural disasters. The difference in impact is due to the damage done to social capital and the spirit for reconstruction.

Our modelling suggests that on average coups bring output down by 14 per cent in the calendar year of the catastrophe. In contrast, natural disasters result in an output decline of 3 per cent, and this is statistically insignificantly different from zero. The detrimental impact of coups on output arises from the large and statistically significant impact it has on investment. Our estimates suggest that per capita investment falls by a massive 40 per cent in the calendar year of a coup. Such falls in investment result in an immediate fall in aggregate demand and output, but more importantly lower the longterm growth of the economy, wiping out decades of economic progress.

Policymakers may be helpless in preventing natural calamites and have a small role in reconstruction after the crisis; their role is a lot more significant in both preventing and in the recovery process after man-made disasters of the nature experienced last May. For a start, the deteriorating law and order situation has to be contained and improved; perhaps via a high-cost concerted effort to stamp out all illegal activity. Respect for institutions has to be regained or else the constitution, the judiciary and property rights will remain paper constructs that can be blown away at will through violence. Democratic principles have to be reasserted at the earliest possible time to enable the interests of the majority to be reflected in policy—unless this is done, there is little hope for a rekindling of growth and prosperity in the nation.

This paper foreshadows some of the responsibilities of policymakers in reviving the Fijian economy and improving the wellbeing of the population.

Notes

- ¹ I am not suggesting that we have more coups, quite the opposite.
- This dependency figure translates into every pair of workers having approximately three dependents.

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Acknowledgment

Helpful comments by Ron Duncan on an earlier draft of this paper are acknowledged.