BURMA'S INSATIABLE STATE

Sean Turnell

Abstract

The bounty presently accruing to Burma from rising exports of natural gas promises to transform the country's finances. Redeeming this promise, however, will require wholesale reform of Burma's fiscal and financial arrangements. Such reforms are unlikely. This article explores the financial potential of Burma's gas exports, the danger that they could yield a "resources curse," and the extent to which the state's fiscal demands compromise Burma's economic development.

Keywords: Burma, economy, public finance, financial systems, resource revenues

For the first time in a generation, Burma's finances are moving beyond the hand-to-mouth existence that has been characteristic to a scenario in which the potential exists for effective capital accumulation.1 The phenomenon driving this rosy possibility is the country's emergence as a significant energy exporter via its large recoverable reserves of natural gas. The rapid economic growth of China and India, and a world generally hungry for energy, has resulted in something of a scramble for access to Burma's gas. The end result is swelling foreign exchange coffers that could enhance the country's economic development—or allow a wasteful spending spree of epic proportions. Burma's has long been a political

1. The label "Burma" is employed throughout this paper in preference to "Myanmar." Though this is highly contested terrain, the former label is less obviously associated with the country's dominant ethnic group, and arguably more commonly employed in the commercial context.
economy of extremes, and thus it is the latter of these scenarios that is the most likely.

The purpose of this article is to explore the implications of Burma’s gas bonanza in the context of the country’s fiscal and monetary circumstances. It begins by first examining, using independent sources, the size and potential of Burma’s gas reserves and their likely future impact on the country’s external position. This potentially positive story is then juxtaposed to an analysis of the dysfunctional condition of Burma’s fiscal situation. Despite recent improvements in tax collection in a number of areas, the state in Burma continues to spend vastly in excess of its revenues. Burma’s resultant budget deficits, which continue to exceed the windfall additions to the country’s foreign reserves from gas exports, are largely “financed” by the country’s central bank simply “printing money” as required.

The destructive repercussions of this strategy are readily apparent in the next section of the article, which explores the lack of finance available to the private sector in Burma. Crowded out by the demands of the state, private-sector capital accumulation is also greatly inhibited by a largely inoperative financial system. This is especially true in the agricultural sector, still the primary location of employment in Burma and the largest source of its gross domestic product (GDP). Next, the article brings all of these themes together in an examination of the extent to which, via the gas bounty, a “resources curse” might be underway in Burma. Noting recent spending on the new capital of Naypyitaw, on nuclear energy, and on some dramatic pay raises for the military and civil service, the article finds that Burma’s rising gas revenues do indeed promise to deliver more vice than virtue. Finally, the article concludes with some ideas as to how such an outcome might be avoided.

Of course, as with any work on Burma’s economy, a substantial caveat must be acknowledged with respect to statistics. Burma’s official economic statistics are unreliable, incomplete, internally contradictory, and frequently subject to dramatic revision. As a consequence, care must be taken in assigning unambiguous truth to any particular measure. This caution duly noted, the data presented below are employed with confidence that they reflect broad trends. Much of the data come from sources independent of Burma’s state organs, and what is ultimately derived from state sources is only that which is broadly verifiable elsewhere. Nevertheless, and as always in Burma, certainty must remain elusive.

**Burma’s Gas Bounty**

For half a century, good news about Burma’s economy has been conspicuous by its absence. As such, it is hardly surprising that Burma’s emergence as a significant regional energy producer has been greeted with great hope.
by observers (within and outside the country) otherwise all too familiar with a narrative of economic stagnation and despair.2

Burma’s emergence as a major energy exporter comes courtesy of its possession of large, and exploitable, fields of natural gas. Cumulatively, these fields have confirmed recoverable reserves of around 540 billion cubic meters (equivalent in size to those of major producers such as Australia and Iraq). This is enough, at current prices and rates of production, to bring in around $2 billion annually for the next 40 years.3

The presence of natural gas in Burma has been known since the colonial era, but it is the presence of natural gas in a number of large, newly accessible offshore fields that excites attention now. Two of these fields, the so-called Yadana (Jewel) fields off Mouttama, and the Yetagan (Valiant Banner) fields off the Tanintharyi coast, came onstream in 1988 and 2000, respectively; they are the overwhelming source of Burma’s current gas deliveries.4 Yadana was a joint venture of Burma’s state-owned energy company, the Myanmar Oil and Gas Enterprise (MOGE), in partnership with Total Oil (France), Unocal (U.S.), and PTT Exploration and Production (PTTE, Thailand). The Yetagan fields were developed by MOGE, Premier Oil (U.K.), and Nippon Oil (Japan).5 In the face of the threat of consumer boycotts, Premier Oil withdrew from Burma in 2002, to be replaced by Petronas of Malaysia.6

The primary customer of the output from the Yadana and Yetagan fields is Thailand, which, in stark contrast to the historical relationship, as a consequence now runs a substantial trade deficit with Burma, reaching

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4. For more on the background to the development of these fields, and Burma’s energy policies more generally, see Tin Maung Maung Than, “Myanmar’s Energy Sector: Banking on Natural Gas,” in Chin Kin Wah and Daljit Singh (eds.), Southeast Asian Affairs 2005 (Singapore: Institute of Southeast Asian Studies, 2005), pp. 257–92.

5. Ibid., p. 265.

6. At present Burma is the target of formal economic sanctions imposed by a number of countries, most significantly the United States and the European Union. Enterprises engaged in Burma are also subject to consumer boycotts in these and other countries. In the wake of the crackdown against protesters in September/October 2007, both Total and Chevron (which acquired Unocal and its interest in Burma in 2005) have come under increasing formal and informal pressure to divest. The “sanctions debate” surrounding Burma is highly contentious and rather beyond the scope of this paper. For more, however, see Sean Turnell, “Burma’s Economic Prospects,” U.S. Senate Foreign Relations Committee, U.S.-Burma Relations, One Hundred and Ninth Congress, March 29, 2006, <http://www.senate.gov/~foreign/hearings/2006/hr060325p.html>, accessed November 5, 2007.
TABLE 1  Burma’s Gas Bounty

<table>
<thead>
<tr>
<th>Year</th>
<th>Gas Export Volumes (million cubic meters)*</th>
<th>Gas Price ($US per million Btu)</th>
<th>Burma’s International Reserves ($US million)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,847</td>
<td>3.49</td>
<td>223.0</td>
</tr>
<tr>
<td>2001</td>
<td>1,849</td>
<td>3.75</td>
<td>400.5</td>
</tr>
<tr>
<td>2002</td>
<td>6,769</td>
<td>2.94</td>
<td>470.0</td>
</tr>
<tr>
<td>2003</td>
<td>9,930</td>
<td>4.54</td>
<td>550.2</td>
</tr>
<tr>
<td>2004</td>
<td>5,664</td>
<td>4.98</td>
<td>671.2</td>
</tr>
<tr>
<td>2005</td>
<td>9,495</td>
<td>7.43</td>
<td>777.7</td>
</tr>
<tr>
<td>2006</td>
<td>9,133</td>
<td>7.31</td>
<td>1,235.6</td>
</tr>
</tbody>
</table>


just over $2 billion in 2006.7 Approximately 43% of Burma’s export earnings that year came from gas sales to Thailand, with most of the remainder coming from sales to Thailand and other countries of timber, gems, copper, and pulses. Without exception, Burma’s significant exports all derive from extractive industries of one form or another. Overall, Burma ran a trade surplus in the year to March 31, 2007, of $2 1 billion.8 Subtracting its large deficit on invisible items (services, interest payments, and profit remittances) yielded a resultant increase in the country’s foreign reserves to $1.24 billion. This was sufficient for more than six months of average imports and came in stark contrast to the bare subsistence balances that have hitherto been typical (see Table 1).

As can be seen from Table 1, and beginning in 2003, the increasing revenues accruing to Burma from its exports of natural gas have come primarily from rising gas prices rather than increasing export volumes.9 This will

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8. Ibid.

9. The prices listed in Table 1 are a composite of those applying to the delivery of natural gas to a number of countries and regions. Gas export prices are typically quoted in “British Thermal Units” (Btu), a measure that accounts for both volume and energy intensity. Though there are other complications that must be taken into account in particular contexts, one Btu is equivalent to approximately 28 million cubic meters of gas.
soon change, however, when production commences (likely in 2010) from new fields off Burma’s Arakan coast. These fields, the most lucrative of which are collectively known as the Shwe (Gol) fields, have roughly the same gas reserves present (an estimated 200 million–240 million cubic meters) as those discovered at the Yadana and Yetagun reservoirs. The Shwe fields were explored and developed by a consortium that comprised MOGE together with South Korea’s Daewoo Corporation, the Korean Gas Corporation, the Gas Authority of India Limited, and India’s Oil and Natural Gas Corporation.

The ultimate recipient of the gas actually delivered from Burma’s Shwe fields has yet to be decided. India was long the presumed customer, but a difficulty soon emerged in that the shortest route for a pipeline to India would have to pass through Bangladesh, which demanded concessions before it would allow construction to proceed. Negotiations between the latter two countries continued for a time, before evidently breaking down. In late December 2005, the Indian government announced that any proposed pipeline would now bypass Bangladesh, coming onshore at Sittwe (Burma) and terminating in Kolkata—a route some 250 miles longer than that via Bangladesh. Rumors of a rapprochement between the two countries over the pipeline are intermittently reported, but as yet the differences remain unresolved.

Apparently impatient with the delays brought on by these negotiations, Burma’s ruling military leadership, the State Peace and Development Council (SPDC), actively sought other bidders for the Shwe gas. These efforts brought results in January 2006, when it came to light that a memorandum of understanding had been signed between PetroChina and MOGE to sell 180 billion cubic meters of gas to China. This move provoked consternation in South Korea and India, not least because the reported price China agreed to pay ($4.28 per million Btu) was considerably below India’s offer of $4.76. Based on current mooted production volumes, this extension of preferential treatment to China will cost Burma around $2.35 billion across the productive life of the fields, or about $107 million per annum. A high price, one might suppose, for China’s diplomatic protection, and indicative that for Burma’s leadership, the country’s economy is not the number one priority. Of course, even the Indian price is well below current spot


rates for natural gas (see Table 1), casting further doubt on the ability of Burma’s government to best manage the country’s natural resources.

In response to the China move, South Korea reacted quickly, with Daewoo announcing its own memorandum of understanding with MOGE, and apparently securing a reported 100 billion cubic meters of gas, later the same month. India was slower to move, its initial response intimating that its whole economic relationship with Burma would now be reassessed. However, in March 2006, during a visit by India’s President A. P. J. Abdul Kalam, yet another memorandum of understanding was signed, allegedly stipulating that India could bid for the gas under identical terms to those granted to China. Meanwhile, in August, in what will by no means be the last word from prospective suitors for the Shwe output, Thailand’s PTTE entered the fray, seeking a 20-year deal from the Shwe fields to complement their Yetaung and Yadana supplies. Sharp-eyed readers will have noticed that the volumes of gas cited in these various memoranda of understanding already exceed the confirmed reserves held in the Shwe fields. As at mid-2008, China’s victory in this “contest” seems certain, but litigation and further dramas appear likely.

Since the dramatic announcements of substantial gas reserves in the Shwe fields, scarcely a week passes without further announcements of gas discoveries off Burma’s coast. Many of these are doubtful. Recent claims by MOGE of a vast field in the Gulf of Martaban (over 240 billion cubic meters, marginally larger than the Shwe fields), have been discounted by MOGE’s erstwhile exploration partner, PTTE. While it is likely that significant undiscovered gas reserves do exist off Burma, it is equally probable that the SPDC and especially MOGE are “talking up” the country’s gas business. Their hyperbolic claims are perhaps to be expected, but they also highlight the extent to which Burma’s energy sector is currently buoyed by positive and possibly irrational sentiment. By nature, commodity markets are extraordinarily volatile, and Burma as a consequence is acutely vulnerable to changes in sentiment and to any downturn in gas prices.

Yet, notwithstanding the undoubted hyperbole as well as the risks, Burma is accumulating foreign exchange in volumes that could and should make a difference in the struggle to lift the country beyond its present least-developed status. Whether it will do so, or fritter this bounty away, is the issue to which we now turn.

16. Ibid. PTTE acknowledges a likely 70 billion cubic meters.
Table 2  Burma Tax and Customs Revenues (Kyat millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Commodities and Services Taxes</th>
<th>Income Tax</th>
<th>Customs Duties</th>
<th>Total Taxes and Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>47,039</td>
<td>36,084</td>
<td>4,691</td>
<td>87,814</td>
</tr>
<tr>
<td>2004</td>
<td>59,017</td>
<td>69,918</td>
<td>4,031</td>
<td>132,966</td>
</tr>
<tr>
<td>2005</td>
<td>112,803</td>
<td>95,703</td>
<td>21,132</td>
<td>229,638</td>
</tr>
<tr>
<td>2006</td>
<td>226,481</td>
<td>144,402</td>
<td>17,894</td>
<td>388,777</td>
</tr>
</tbody>
</table>


Burma’s Chronic Public Finances

The most enduring pathology of Burma’s economy, present almost from the moment the country achieved independence in 1948, has been the excessive financial demands of the state. Burma’s last fiscal surplus was in 1962 (not coincidentally, the year democracy came to an end). Since then, the state’s profligacy has become habitual. Burma’s military regime has not published data on its overall fiscal position since 1999/2000. Tax data are published, but data on government spending are not. Nevertheless, as shall be detailed below, it would appear that state spending in Burma is at least twice the magnitude of its tax collections.

In very recent times, however, the SPDC has instigated a number of changes to Burma’s tax and subsidy arrangements that have had a modest impact on the country’s fiscal position. Most of these have included increases in consumption taxes and import duties of various kinds. The former include increases in electricity prices in October 2005 and again in May 2006, as well as the dramatic eightfold increase in fuel (petroleum) prices that also took place in 2005. With respect to customs duties, revenues were supposedly enhanced by a crackdown against corruption in the Customs Department in mid-2006. Most likely is that customs revenue increases (see Table 2) have come from modifications to the exchange rate through which they are calculated. This increased from an applied rate of K 100:US$1 in 1996 to K 450:$1 in 2004, followed by successive jumps to K 850:$1 and then K 1,200—1,250:$1 in 2006. Across these years, this implied an effective twelve-fold increase in customs duty rates in Kyat terms. Meanwhile, efforts to implement the taxation of income brought about a

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doubling in the tax rates applicable to private enterprise (and their employees) from 10% to 20% and an increase in the profits tax on foreign-owned firms from 35% to 40%. Finally, in May 2007, in an apparent effort to crack down on the widespread avoidance of income taxes in Burma, the Ministry of Finance announced that licenses to conduct business would not be issued unless all taxes and arrears were paid in full.

But the increases in tax collections revealed in Table 2, dramatic though they are, come off an extremely small base and have done little to dent Burma’s chronic fiscal deficits. In 2005, tax revenues amounted to a mere 2.6% of GDP (4% for the incomplete 2006 data). By way of comparison, a representative sample of developing countries constructed by the International Monetary Fund (IMF) found an average tax collection to GDP ratio of about 18% (38% for industrial countries).

Of course, against the small amount of formal tax collection in Burma is the state’s anything-but-small spending. As noted above, official statistics on state spending have not been available since 2000. Nevertheless, given the increases in central bank financing of state activity (see below), as well as other proxy indicators, a reasonable presumption is that state spending in Burma is at least double that of tax revenues.

What is this spending on? Not surprisingly, much of it makes its way to the military, which according to the U.S. Central Intelligence Agency (CIA) estimates absorbed 2.1% of Burma’s GDP in 2005. This represents over 80% of total government spending, according to our estimates above. Substantial government spending also makes its way to Burma’s numerous inefficient state-owned enterprises (SOEs), which absorb an estimated two-thirds of total state spending. Some of this is a component of the military budget.

In contrast to the vast sums absorbed by the military and SOEs, Burma spends a paltry amount on health and education, collectively amounting to about 1.4% of GDP (0.5% on health, 0.9% on education). This is less than half that of the next lowest spender, Indonesia, among the ASEAN

TABLE 3  State Share of Myanmar’s Financial Resources, Selected Indicators (Kyat millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Central Bank Lending to Government</th>
<th>Commercial Bank Lending to Government</th>
<th>Commercial Bank Lending to Private Sector</th>
<th>Unofficial Exchange Rate ($US/Kyat)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>331,425</td>
<td>12,460</td>
<td>188,149</td>
<td>350</td>
</tr>
<tr>
<td>2000</td>
<td>447,581</td>
<td>36,159</td>
<td>266,466</td>
<td>500</td>
</tr>
<tr>
<td>2001</td>
<td>675,040</td>
<td>40,985</td>
<td>416,176</td>
<td>650</td>
</tr>
<tr>
<td>2002</td>
<td>892,581</td>
<td>43,248</td>
<td>608,401</td>
<td>960</td>
</tr>
<tr>
<td>2003</td>
<td>1,262,588</td>
<td>35,546</td>
<td>341,547</td>
<td>900</td>
</tr>
<tr>
<td>2004</td>
<td>1,686,341</td>
<td>89,217</td>
<td>428,391</td>
<td>1,000</td>
</tr>
<tr>
<td>2005</td>
<td>2,165,154</td>
<td>100,358</td>
<td>570,924</td>
<td>1,300</td>
</tr>
<tr>
<td>2006 (Sept)</td>
<td>2,593,246</td>
<td>120,513</td>
<td>596,298</td>
<td>1,350</td>
</tr>
</tbody>
</table>


* Approximate annual average, author’s estimates

countries, and lower still relative to ASEAN’s other poorest members, Cambodia and Laos, which spend 3.5% and 3.3% of GDP, respectively.26 Burma is also unique among its peers for spending more on the military than on health and education combined.

"Printing Money" to Finance the State

In the absence of sufficient tax revenue, Burma’s state expenditure is financed by the simple and highly destructive expedient of mandating the central bank to print or issue money of whatever volume is required. As can be seen from the first column in Table 3, such monetary expansion dwarfs taxation revenues. Moreover, and notwithstanding the belated increases in tax, the necessity for such financing is growing. In 2005, the latest full year for which we have data, central bank funding of the government rose by K 478.8 billion ($368.8 million), up an extraordinary 28.4% on the previous year. Meanwhile, in the six months to September 2006, the central bank lent an additional K 428.1 billion ($329.3 million), an increase of 19.8% on the full-year total for 2005, clearly illustrating that Burma’s public finances are continuing to deteriorate.

The monetization of Burma’s fiscal deficits brings with it a number of negative consequences, not least an inflation rate that is officially in low

double digits but which is currently probably on the order of 30%-40% per annum.27 Such inflation undermines both trust and the purchasing power of Burma’s currency, the most transparent measure of which is the Kyat’s declining unofficial exchange rate. The final column of Table 3 illustrates this slide against the U.S. dollar. Of course, as shall be detailed, the waning confidence in Burma’s currency has had severe repercussions for the stability and proper functioning of the country’s financial system.

A Drought of Private Finance

Burma’s current export (gas) bounty does not extend to its besieged private sector. The most important reason for this is simply that Burma’s booming exports are controlled by the state and its enterprises. In the year to March 31, 2007, SOEs accounted for 52% of Burma’s trade (up from 47% the previous year), and their dominance is even more pronounced with respect to exports—61% of which passed through state entities. Indeed, some 43% of total exports were earned by MOGE alone, which brought in $2.16 billion in 2006, up from $1.08 billion the previous year.28

Precluded from much in the way of access to overseas funds, and in the absence of a functioning stock market, bond market, or any of the usual financing vehicles available to firms in most countries, formal finance for private enterprise in Burma is limited to that made available by the country’s commercial banks (state and private owned). Even here, however, the circumstances are dire. Bank lending in Burma has recovered somewhat since the 2003 banking crisis (more on which below) but it remains pitifully meager. In 2005, total funds lent by the banks was a mere one-eighth of that provided by the central bank to the state. Of course, as can be seen from the data in Table 3, a substantial component of bank lending (more than 20% of the funds they provide to the private sector) also made its way to the government. Burma’s banking sector, in fact, scarcely performs an intermediation function, for which the fault once more lies in excessive state interference—in this case, heavy-handed and inappropriate regulation. There are many examples of this but representative are restrictions imposed on Burma’s banks that cap the interest rates they can charge on loans, and pay on deposits, at 17% and 12%, respectively.29 Such rates, well below even the most optimistic estimates of Burma’s inflation rate, reward neither saver nor lender: The low levels of voluntary saving in Burma, and

29. For more on the regulations distorting the functions of banks in Burma, see Sean Turnell, “Profiles of Burma’s Banks,” Burma Economic Watch 1:06 (2006), pp 3-33
the inadequate lending to the private sector, are the entirely predictable consequences.\footnote{In June 2007, the essentially moribund state of Burma’s banks was underlined by an announcement from the central bank that places limits on the amount of deposits that banks can accept. The imposition of these limits, stipulating a ceiling on new deposits of K3 million per customer, per week, is an implicit recognition that the banks can find few profitable lending opportunities. See Shah Paung, "Burma’s Private Banks Limit Deposits to Stay Alive," \textit{The Irrawaddy}, July 26, 2007, <http://www.irrawaddy.org/>.}

\textbf{Burma’s Moribund Banks}

Crowding out by the state is the most important and pernicious of the maladies affecting private sector finance in Burma, but it is by no means the only one. Burma’s financial system is dysfunctional in other ways, a situation that was spectacularly revealed in the country’s 2003 banking crisis. A much underreported event internationally, the collapse of Burma’s leading banks in 2003 brought about at least two years of negative economic growth, notwithstanding the official GDP numbers, and reduced Burma for a time to a near-barter economy.\footnote{For a comprehensive analysis of Burma’s 2003 financial crisis, see Sean Turnell, “Myanmar’s Banking Crisis,” pp. 272–82}

Burma’s 2003 banking crisis was triggered by the collapse of a series of informal finance companies that were little more than Ponzi or pyramid schemes. The existence of such schemes, which promised Burmese with money a hedge against chronic inflation, was itself a sure sign of a malfunctioning financial system. Through the failure of these schemes, and via specific links and simple contagion, the crisis quickly extended into the country’s private banking sector. Subsequent runs on the banks stripped them of reserves and prompted the adoption of measures to restrict deposit withdrawals. In the panic, a flight to cash led to a shortage of the Kyat and a liquidity crisis. Liquidity support, had it been rapidly and appropriately supplied by the Central Bank of Myanmar (CBM), could have limited the contagion. The CBM, however, failed miserably in the crisis and its support was both too little and too late. Burma’s private banks, which superficially had appeared to be performing strongly before the crisis, were irreparably damaged. As can be seen from Table 3, recovery from the damage to Burma’s banking sector has been slow. Most significantly, bank lending to the private sector has yet to regain the levels prevailing before the crisis.

Even before the 2003 events, however, Burma’s banking system did little to provide the finance desperately needed by truly productive private enterprise, and loans to businesses \textit{unconnected} either to the banks or to the
government were both expensive and hard to come by. Surveys of Burmese business owners conducted by the author reveal that the private banks are generally wary of lending to new enterprises that can offer little in the way of collateral. Meanwhile, for those that can put up collateral, the requirements are steep. A rule of thumb adopted by many banks is a demand for fixed-asset collateral of around 200% of the value of a loan. Such collateral can really only be offered by well connected borrowers within larger business groups and/or parties with links to government and military enterprises. These same surveys reveal that unconnected borrowers are also typically asked to pay hefty establishment fees for loans. Such fees function as recompense for the capped interest rates charged by the banks, but they also greatly boost borrowers’ credit costs. The fees are sometimes informal—simple bribes paid to individual loan officers—but often they are imposed with the full knowledge of bank management.

The high collateral requirements and other loan costs have created a situation in Burma where private banks lend predominantly to enterprises and individuals able to generate both high and quick returns. Such enterprises tend to be engaged in highly speculative activities, in particular, hotel and real estate speculation, gold trading, jade mining, fishing and logging concessions, and (for a brief period) garment factories. It has also been the case that an extra “return” could be gained if the borrowers were so-called leaders of national races, many of whom enjoy extra privileges through special access to high-yielding natural resource sectors. Of course, sometimes banks will partner especially well-connected individuals on no terms at all, writing off their contribution as political insurance.

Burmese enterprises generating returns in the medium to long term, such as manufacturers, receive little bank finance. According to a Japanese survey of 167 small to medium manufacturing enterprises (SMEs) in 2006, most rely upon self-financing and on funds available from friends and

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32. These interviews were conducted by the author across 2006-07 in the United States, Singapore, and Thailand, as well as in Burma itself (remotely, via various secure channels). See also May Thander Win, “Banks Claim a Solid Recovery,” *Myanmar Times*, July 31-August 6, 2006, [http://www.mmntimes.com](http://www.mmntimes.com).

33. This assertion is based on interviews with borrowers from the banks by the author.

34. Many of these leaders were those who had made ceasefire agreements between the groups they represented, and the SLORC/SPDC. For more, see Bruce Hawke, “Burmese Banking: The Yangon Laundromats Burnout Explained,” *The Irrawaddy* 12:4 (April 2004), pp 17-21.

35. One of the most damaging issues surrounding Burma’s banks are the widespread accusations that they are engaged in laundering the substantial money generated through Burma’s narcotics trade. For more on this, see Sean Turner, “Burma’s Economic Prospects,” pp 14-16.
family, rather than bank loans. This is true even for working capital and trade (supplier) finance, which sets the experience in Burma apart from that commonly observed for SMEs in other countries. The Japanese survey also drew attention to the fact that most of Burma’s new banks are at the center of conglomerates and, in this context, demonstrate a bias in their lending to related entities.

Beyond self-financing, for many enterprises, informal moneylenders remain their only source of capital. The ubiquity of moneylenders in Burma is time honored and the emergence of formal private banks in the 1990s did little to dent their importance. Especially dominant is ne pyan toh (one-day lending), usually provided to market traders by moneylenders (mostly women in Burma) according to a common formula of an 80 Kyat loan in the morning, and a (somewhat usurious) 100 Kyat repayment the same evening, i.e., a payback ratio of 125%. Such moneylending activity is also a significant source of competition for bank deposits because, as one moneylender explained, “Most people with money keep it as far away from the banks as they can. With inflation running over 20 per cent (sic), you’ll lose money in a regular savings account. And why settle for 10 per cent a year when you can get three or four times that, with probably the same amount of risk, in the private money market?”

Finance for Agriculture

Of all the private sector activities repressed by Burma’s dysfunctional financial system, no situation is more acute, or its repercussions so dire, as in agriculture. For reasons as unfathomable as they are destructive, Burma’s commercial banks are forbidden to lend to farmers for cultivation. In their place as formal credit providers is the state-owned Myanmar Agricultural Development Bank (MADB). This institution is meant to be the sole provider of rural credit in Burma, but its own modest objective of providing finance to meet just 30% of a cultivator’s production costs is internal recognition of its severe limitations. In fact, in practice the MADB falls well short of meeting even this modest target. Average loans to paddy cultivators (80% of all MADB lending is to such farmers) were between K 2,000 to K 8,000 ($1.60 to $6.40) per acre of paddy in 2004, the latest year for which we have anything like reasonable data, against cultivation


costs of the same crop of around K 60,000 ($50) \textsuperscript{38} The roughly 90% financing gap is met via recourse to the moneylender—and by simply going without. MADB claimed to have 1.2 million borrowers in 2004, or 17% of all rural households, down from 1.7 million in 1999.\textsuperscript{39}

A significant reason for the MADB’s parsimony is that the bank itself is desperately short of funds—indeed, it has been decapitalizing over recent years. As its primary source of funds, the MADB claims to have two million depositors, but in fact it attracts little in the way of actual deposits (a mere K 4.6 billion [$3.7 million] in 2004).\textsuperscript{40} Deposits in the MADB are inhibited by the same restrictions imposed on other banks in Burma, including those on the interest rates the bank can pay. But in addition to this, and even more damaging, has been a policy in place since 2003 that greatly restricts the ability of depositors to withdraw their deposits.\textsuperscript{41} In the wake of this, the only remaining matter of wonder is that the MADB attracts any deposits at all.

In 2004 the MADB’s capital stood at just K 1.2 billion (around $1 million), an extraordinarily small financial platform upon which to pursue the functions of a countrywide bank with over 200 branches and engaged in a form of lending with strong covariant risks.\textsuperscript{42} The MADB desperately needs an injection of capital, but the only recent policy in this direction is a most destructive order that compels the bank to pay the government a dividend of 25% of its annual profits. Alas, such profits that might be claimed by the MADB are surely entirely fictitious. Since 1991 the bank has been forbidden from writing off bad and doubtful debts; as a consequence, it claims a repayment rate of 100%.\textsuperscript{43} This fanciful figure may be compared to an annual provision against bad debts by Thailand’s analogous Bank for Agriculture and Agricultural Cooperatives of around 15% of its portfolio.\textsuperscript{44} Restating the MADB’s “earnings” to include any reasonable estimate of loan losses would eliminate any supposed profits, diminishing the bank’s capital even before the extraction of the government’s dividend.


\textsuperscript{39} Ibid., p. 6.

\textsuperscript{40} Ibid., p. 25.

\textsuperscript{41} Ibid., p. 2.

\textsuperscript{42} Covariant risk in this context refers to the situation in which all borrowers face circumstances that may inhibit their ability to repay their loans. Agricultural lending is especially susceptible to covariant risk because seasonal factors tend to have an impact upon all borrowers simultaneously. Ibid., p. 5

\textsuperscript{43} Ibid., p. 10.

The lack of finance imposes heavy costs on Burmese agriculture in terms of productivity and certainly inhibits the ability of cultivators to move to more capital-intensive modes of production. Even fertilizer is beyond reach for most borrowers reliant upon MADB loans. One consequence is that fertilizer is now seldom used in Burma, a phenomenon that has the effect of reducing agricultural yields, and income, all round. Debbie Aung Din Taylor painted the immediate human cost of this in the wake of her own observations in 2002:

Farmers are using less and less fertilizer, families are abandoning farming and becoming landless, yields of key crops like paddy and sesame are declining and rice prices are rising ... more children are dropping out of school, large numbers of people appear to be criss-crossing the country in search of paid work, and farm families are going hungry on one meal a day consisting of rice gruel.  

A "Resources Curse" in Burma?
Known for centuries under a myriad of labels, the notion of a "resources curse" refers to the seeming paradox of a country that holds abundant natural resources but nonetheless underperforms economically. Initially, the idea derived from observing harmful effects on the manufacturing sector of real exchange-rate increases via booming commodity exports (the so-called Dutch disease). But in recent times, attention has turned to the possible ways that resource windfalls can undermine good governance, democracy, the rule of law—and other attributes and institutions conducive to economic growth. Resource revenues, being easy to distribute to well connected insiders and others, are said to promote corruption and underinvestment in human capital, and to allow governments the wherewithal to be unresponsive to the needs of their (often non-tax paying) citizenry. The most obvious manifestation of a resources curse along these lines are grandiose national prestige projects that litter much of the developing world.

47 The first example of a resources curse was probably that flowing from the negative effects on 16th-century Spain of the influx of precious metals from the New World. The modern label for the phenomenon seems to have its origins in Richard Auyer's Sustaining Development in Mineral Economies: The Resource Curse Thesis (London: Routledge, 1993).
48 Burma was recently judged by Transparency International as the second-most corrupt country in the world (bested only by Somalia), see <http://www.transparency.org/>. As noted above, however, the notion of a resources curse extends beyond simple corruption, to include the broader distortions wrought generally by windfall gains.
Of course, Burma has long been without the political and economic institutions and attributes conducive to development. Yet, and despite the brevity of time in which gas revenues have accrued, a resources curse already seems to be in play. Bad decision making by Burma’s governments has been chronic but the SPDC’s new-found spending power does seem to have manifested itself in regrettable ways. Some particularly egregious examples (unfortunately from a likely growing set) are discussed below.

Naypyitaw

For reasons much speculated upon but still obscure, in November 2005 Burma’s government apparatus decamped en masse to the newly constructed capital of Naypyitaw. This widely reported move, the astrological details of which have been a particular fascination, is the latest in a long list of peculiar decisions made by Burma’s various military governments down the years, but whose economic effects have proved both ill and long-lasting.

It is impossible to determine any precise financial cost for Naypyitaw. The details of its construction remain a closely guarded secret (even by Burma’s standards). Estimates would be clouded by the reported wide-scale use of forced labor as well as the concessions that private firms were said to have received for building the physical infrastructure of the new capital.

The construction of new capital cities is not unusual in countries suddenly presented with commodity largesse and seeking to assert a new political identity. Almost universally, however, these capitals have proved extraordinarily wasteful of resources as well as conducive to bureaucratic sclerosis. With requests for export and import permits already clogging the information arteries to and from Naypyitaw, this particular piece of profligacy seems already to be costly for Burma, whatever the direct impact on the government’s budget.

49. Consulting astrologers, soothsayers, and numerologists before making major decisions is common among ordinary Burmese, but it has become a particular habit of the chairman of the SPDC, Senior General Than Shwe. According to the rumor mill, it was Than Shwe’s astrologer who was decisive in the move to Naypyitaw, advising the general that Rangoon faced natural disaster and would become a source of political unrest. For a comprehensive summary of the reporting of the move, and the speculation on what was behind it, see Kate McGeown, “Burma’s Confusion over Capital,” BBC News, <http://news.bbc.co.uk/1/hi/world/asia-pacific/5086056.stm>, accessed July 9, 2007.

50. Ibid. The ADB simply says that the expenditure on Naypyitaw will offset whatever advances are being made in Burma in raising more tax revenue. ADB, Asian Development Outlook 2007, p. 220.

51. Such “new” capitals include Brasilia (Brazil), Canberra (Australia), Ottawa (Canada), and, perhaps most pertinently for Burma, Abuja (Nigeria).
Pay Raises

Related to the transplanting of the capital, and in an apparent effort to avoid mass resignations and retirements of those unwilling to leave Rangoon, was the announcement in April 2006 of dramatically increased salaries for about one million civil servants and military officers.\textsuperscript{52} These wage increases ranged between 500\%–1,200\% Justifiable perhaps in Burma’s high-inflation economy (though other segments of society did not see an increase in their salaries or payments), the pay raises only added to the impression of a regime willing to spend new-found revenues for political acquiescence, whatever the economic consequences. In fact, as it turned out, any economic benefits accruing to the recipients of the pay raises were probably ephemeral. In expectation that inflation would accelerate as a consequence of the pay hikes, traders in Rangoon and elsewhere preempted matters, boosting prices as soon as the increases were announced. There was also a flight from the Kyat and hefty increases in the price of gold, foreign currencies, and other inflation hedges. Of course, once more the real losers from all of this were those outside the civil service and the army, whose lot was only worsened by the rising prices.

A Nuclear Burma?

Perhaps the most egregious of all the sudden spending announcements made in the face of Burma’s growing gas windfall was that the country had agreed on terms with Russia in May 2007 to construct a nuclear reactor.\textsuperscript{53} A deal that was first mooted in 2000, it seemed to have been abandoned in late 2002, apparently because of Burma’s inability to pay the advance in foreign exchange demanded by Russia. In the wake of Burma’s accumulating foreign reserves, however, such forced restraint is no longer active. According to reports from the Russian side of the deal, the reactor is a 10-megawatt device that is accompanied by laboratories to produce medical isotopes (Burma’s paltry spending on health has already been noted) and facilities to store nuclear waste. The financial cost of the reactor has not been disclosed officially, but Russian sources have put it at around $500 million.\textsuperscript{54} Of course, it is highly likely that strategic considerations (and possible lessons from the world’s response to North Korea) are

\textsuperscript{52} Ardeth Maung Thawnghmung and Maung Aung Myo, “Myanmar in 2006: Another Year of Housekeeping?” p. 197

\textsuperscript{53} The following is but a brief sketch of this controversial project, for which no better source exists than Andrew South’s, “Burma and Nuclear Proliferation: Policies and Perceptions,” Griffith Regional Outlook Paper, no. 12 (Brisbane: Griffith University, June 2007).

\textsuperscript{54} The source was Atomstromexport, the agency overseeing Russia’s international nuclear-energy deals. See William-boot, “Nuclear Center to Cost $540 million, but Who Pays?” The Irrawaddy, June 1, 2007, <http://www.irrawaddy.org>.
the prime motivations for Burma’s decision to go nuclear. Although there is little evidence that Burma is actively seeking nuclear weapons, the deliberate creation of ambiguity over the issue is perhaps not without its uses to Burma’s military leaders.

Some Concluding Thoughts on Ways Forward

Bad governance, corruption, fiscal irresponsibility, conflict over natural resources—all these recognizable symptoms of a resources curse in fact pre-date the discovery of commercial quantities of gas in Burma. However, as this article has sought to demonstrate, the accumulation of foreign reserves occasioned by Burma’s gas exports has transformed the country’s finances and its spending, thus far in ways that are purely negative.

The widespread prevalence of resource curse problems around the world has prompted the creation of a number of devices aimed at mitigating their impact. Perhaps the most prominent of these are resource “stabilization funds,” institutions legally independent of the state and into which resource revenues are paid.55 Their function is to insulate the government’s finances from the unpredictability and volatility of resource revenues while providing a vehicle in which to save and invest these revenues in productive ways. Of course, by squirrelling away revenues in this manner, these institutions are also meant to help discipline spending. Stabilization funds have been employed in many countries, most of them inspired by Norway’s extraordinarily successful State Petroleum Fund created in 1990 to manage windfall gains from its exports of North Sea oil. Similar stabilization funds have subsequently been established in Azerbaijan, Kazakhstan, Papua New Guinea, Venezuela, and most recently, East Timor. Alas, except for the last case (for which the jury is still out), these funds have proved a severe disappointment. The reason for this is simple. It boils down to the lesson that to be successful, stabilization funds need more or less the same good governance as is generally required to avoid a resources curse in the first place. Whatever the legal safeguards, in practice stabilization funds have proved no less susceptible to manipulation, mismanagement, and outright government plundering than national budgets. The sobering reality is that stabilization funds seem only to be viable in countries (demonstrably such as Norway) that do not need them.

A particularly promising device for reducing the ill effects of resource curse phenomena, one that might be especially suited to Burma, is cre-

ation of a revenue distribution fund (RDF). As the name implies, an RDF has a very simple role—to distribute resource earnings directly to a country's citizens in the form of dividend payments. Little in the way of institution building is necessary for an RDF and, as a result, they can be created relatively quickly. Corruption is also minimized in company with the minimal funds that are accessible to government and its agents. But RDFs bring other developmental benefits too. The revenues they disburse provide an alternative income stream and reduce income volatility for people who otherwise are subject to the vagaries and hazards of the agricultural season. The payment of a flat dividend to every citizen can also reduce income inequality; it gives everyone a stake in the country's progress as well as constituting a powerful incentive against fund mismanagement. Best of all for long-term development, such dividends can become the basis for the creation of new businesses and economic activity, directly via the dispersed funds as well as via their use as loan collateral. The best known of the RDFs has operated in Alaska since 1976, but their usefulness to developing countries has been the subject of strong advocacy in more recent years, notably in the context of Iraq.\footnote{See, for instance, Thomas Palmer, "Combating the Natural Resource Curse with Citizen Revenue Distribution Funds: Oil and the Case of Iraq," Foreign Policy in Focus Discussion Papers (May 2002), <http://www.fpif.org/papers/>, accessed August 3, 2007. Details of the Alaskan scheme, the "Alaska Permanent Fund Corporation," can be found at its official website, <http://www.apfc.org/>}

Would Burma's current government create an RDF to distribute gas revenues to the country's citizens? Alas, it must be doubted. Government control, the very thing implicitly undermined by an RDF, would appear to be precisely the objective most desired by the SPDC.\footnote{Democracy, the rule of law, transparency, and accountability in government decision making—surrounded and stimulated by a free press—are other "institutions" with proven efficacy in inhibiting the ill effects of a resource curse. Their establishment in Burma is, alas, rather less likely at the moment than the creation of a device such as an RDF.} Accordingly, this article must end with the pessimistic conclusion that there is no reason yet to suggest that Burma's leaders will avoid what has become their habitual tendency to miss opportunities. Burma passed up the chance to join its peers and neighbors decades ago when the latter embraced openness; it sought the alternative path of isolation and the economic policies of dirigisme. The world's unquenchable thirst for energy is set to provide Burma with a new opportunity to correct the mistakes of the past. It will be a great pity, if not a surprise, if it is missed.