PNG’s Economy 2014—past, present and future prospects

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Economic Performance: Papua New Guinea’s economic performance has now sustained positive economic growth for over a decade, initially marginally above the population growth rate, but building up progressively until 2011. The previous decade, by contrast, was one of severe swings and troughs, with repeated structural adjustment programs applied to address successive fiscal and foreign exchange crises, triggered by poor expenditure control and unrealistic expectations, fuelled partly by a much vaunted minerals and oil boom.

Since 2007, GDP growth has remained above 5% per annum, on the back, initially, of strengthening commodity prices, and subsequently the major PNG LNG construction project, but also following various structural reforms, greater fiscal prudence and reduced public debt levels, which shored up market reassurance. Opening up the ICT market to improved (though still inadequate) competition and coverage, and drawing upon accumulated liquidity, notably for real estate development, also played a part. With the winding down of the LNG construction phase over the past two years, plus lower commodity prices, growth has slipped back in 2013-14, but remains just above 5%, supported by a stimulus package of major infrastructure projects, provided through deficit financing.

PNG weathered the storm of the Global Financial Crisis and subsequent international economic crises since 2008 through strong bank liquidity, relative isolation from global financial markets, active ongoing capital investment, and continued firm demand and prices for some of the country’s major export products despite the crisis, notably gold. However, since 2012, reduced PNG LNG construction activity and associated contracts have coincided with a decline in prices of PNG’s major export commodities, including gold, oil, but also other minerals and some agricultural products.

The growth rate for 2013 ended at 5.5%, boosted by the new – though often long delayed – investment in infrastructure (notably in roads and sport stadiums in NCD and in some districts). Growth forecasts for 2014 were revised slightly downwards in the Treasury’s Mid-Year Outlook (MYEFO) to 5.4%, despite LNG production and exports commencing on schedule in May, and shipments proceeding to the Asian market at around a vessel every three days. Despite stronger prices for some agricultural commodities, such as coffee, forecasts for non-mining GDP growth for the year were reduced in the MYEFO to 1.1%.

Forecasts for 2015 indicate a leap in GDP growth to 21% on the back of the first full year of LNG production, although the Gross National Income, in many ways a more useful measure of economic activity and benefits retained in PNG, will be nearer half that level, and non-mining GDP growth is forecast at 4.3%. With around 80% of the equity in the PNG LNG project owned by overseas investors, the bulk of earnings will be retained offshore. As a highly capital intensive industry, gas extraction and onshore processing, provided the greatest direct local benefits to the local economy during its construction phase, when up to 21,000 were employed by the developer or its contractors in PNG, of whom up to 8,500 were Papua New Guineans. Upon completion of the construction phase, the workforce fell back to nearer 1,000, comprising both skilled technicians, but also a substantial portion of security personnel, and the multiplier effect of the project becomes quite limited. The project’s main longer term benefit to PNG will be sustained revenue over its estimated 30 year lifespan, as well as providing a platform for the further development of the country’s gas industry. The revenue from PNG LNG will remain limited in the first three years of production, notably as debts are serviced, but thereafter the impact of the project on the wider economy will be
dependent largely upon the effectiveness of the utilisation of tax and dividend revenue by the National and respective beneficiary provincial governments.

Beyond the 2015 jump, GDP growth rates are forecast to return to more modest levels in 2016 and beyond, barring any further major projects proceeding, (such as the Gulf gas fields by Total and partners) or hike in commodity prices, with Treasury forecasting 2.7% total GDP growth and 3.6% for non-mining growth for 2016, and maybe picking up in 2017, particularly if global economic conditions become more favourable, and recent uncertainty, notably in European and North American, but also Japanese and, of late, Chinese markets, declines.

It should be noted that whilst the extractive industries are increasingly dominant in terms of export earnings and revenue, the renewable resources sector remains on a par with the extractives in terms of contribution to GDP, and particularly in terms of the provision of household income and other benefits.
PNG’s development paradox is as a land of relatively abundant natural resources, with various world class resource-based projects operating, and yet an overall economic performance which has been poor and failed to deliver broad-based economic and social opportunities for most of the population, notably in the lacklustre 1980s and turbulent 1990s, but even during the 2000s when overall growth rates have largely been positive and at times strong. Lack of maintenance and development of basic infrastructure, and inadequate investment in core skills and services, including education and training, health and police, has undermined broad-based economic opportunities and left PNG still with amongst the worst social indicators in the Asia-Pacific region.

Increased budget allocations in recent years and donor support for core functions, such as restoring and upgrading infrastructure, education and health services (including free primary and early secondary schooling), police and rural areas, has been undermined by weak governance and oversight, limited planning and implementation capacity, as well as rapid population growth, particularly in some provinces and urban centres. So, by 2014 access and health services for much of the population, particularly in rural populations, is worse than it was in past decades, and whilst education attendance has improved markedly over the past decade, particularly for girls, the quality of education is widely reported to have deteriorated, with standards having declined and class numbers having increased to unproductive and unmanageable levels, with poorly resourced teachers overstretched, where present.

The PNG LNG development has generated high expectations within government and the community, however, awareness has been raised by commentators and development partners of the risks associated with so-called Dutch Disease. This phenomena, usually, but not exclusively linked to major extractive industry developments, is associated with distorted expectations, loss of fiscal restraint, inclination to over and pre-commit against forecast earnings and to underestimate risk, fuel corruption, but particularly entails appreciated exchange rates, thereby undermining competitiveness and hence prospects for other export industries, import replacement and other domestic industries, including tourism. PNG suffered aspects of this ailment with the 1990s so-called ‘minerals boom’, when PNG also enjoyed record GDP growth in 1993, upon the commencement of Kutubu oil production, but the government failed to manage expectations and
forfeited its precursor sovereign wealth fund (the MRSF), mistook GDP for revenue growth and successively blew the budget and foreign exchange reserves, although ultimately safeguarding domestic industry competitiveness with the devaluation of the kina. Lessons have, hopefully, been learnt from the 1990s experience and the relatively fiscal prudence of the 2000s, but warnings bells are certainly being rung, with recent official levels of debt rising back from 25% of GDP to nearer 40%, much of that from short-term and increasingly costly borrowings, and in excess of the ceiling set under the Fiscal Responsibility Act. This is supplemented by extra-budgetary borrowings, notably for equity acquisitions and other non-core government functions, plus contingent liabilities, raising debt well in excess of this level.

Following an extensive consultation process, legislation was passed in 2012 for a Sovereign Wealth Fund, intended in part to help stabilise annual revenue from the resource sector and reduce pressures on the exchange rate. The new Government has subsequently reconsidered aspects of the SWF objectives and arrangements, and is planning to table amendments to this legislation in late 2014. It would have been valuable to have had an effective and transparent SWF in place to manage the so-called ‘windfall revenue’ of 2007/8, and certainly for future increased revenue from the resources sector. However, at this stage it appears that future LNG earnings are already substantially offset against heavy prior-borrowings, leaving little prospective additional revenue to invest or stabilise in the Fund, net of ongoing annual expenditure and debt servicing. This is particularly the case in that revenue from PNG LNG is expected to largely replace, rather than supplement, what has been received from other extractive industries over recent years, at least unless or until additional trans of gas are provided from further LNG projects. Nevertheless, it is crucial that the SWF is in place, and subject to high governance and accountability standards (under the Santiago principles) and clear and appropriate operating rules, prior to any potential hike, particularly short-lived increase, in resource revenue, whether from higher prices and/or production, to ensure economic, as well as expenditure stability (and minimise negative impacts on other sectors), as well as to meet other fund priorities.

Despite being a developing country, PNG suffers many of the high costs of a developed country, alongside household incomes and living standards of a developing country. It is a relatively high cost location for ‘doing business’, with many potential business activities relatively uncompetitive. These costs are partly determined by geographical factors, which raise total and unit costs of establishing and sustaining infrastructure, service provision and market access. However, costs and risks have been raised also by poor economic management, poor governance (including corruption) and coordination, with deficient expenditure and accountability of spending on core public goods (at the national and district level), notably transport and other basic infrastructure, and particularly its maintenance, but also on effective service provision in law and order, education and accessible health services. Unreliable and costly transport infrastructure, core utilities and services raise the costs of business and investment, whether by large corporate investors or micro-enterprises, including smallholder farmers, who provide the majority of agricultural production, including a substantial portion of agricultural exports, and remain the bulk of PNG’s workforce.

Undercapitalised, unduly politicised and under-performing state-owned enterprises, many still enjoying major monopolies, like PNG Power, undermine prospects for business and consumers alike. Maladministration of State land and public tenders, were highlighted in the 2012 INA Business Survey as two most frequently impediments to prospective investment and business. While the
survey found some areas of improved business environment since 2006, law and order problems, and poor transport infrastructure were again considered the worst impediments, followed by the inadequate and costly provision of power. ICT infrastructure was considered to have improved since 2006, with the opening initially of the mobile phone market to new investment and competition, but survey respondents considered the provision of ICT services in PNG to remain a major business impediment, with the limited competition and associated high costs, particularly on core internet services. Unit prices need to fall substantially to enable major increased ICT usage, yet major increased usage (and competition) seems to be a prerequisite by ISPs for reducing prices.

In recent months many mixed messages have been provided. The business sector has welcomed the far-reaching and consultative tax review and assurances by the Prime Minister that no major changes to business conditions will occur without prior consultation with affected parties. The government’s commitment to supporting PNG small to medium enterprise, including women in business, has also been welcomed, in principle, as has the need to periodically review investment conditions and associated legislation in the mining sector. The Government’s commitment to the EITI process for transparency over transfers from the extractive industries to government, and ultimately into public goods, and for improved sector governance, are welcomed, as has been the Government’s commitment to cancelling the Special Agriculture and Business Leases (SABLs), which has not only been an illegal land (and forest) grab by unscrupulous businesses and individuals, but also undermined some genuine potential projects, where investors required greater standards and legitimacy.

On the other hand, policy statements and measures from some Ministries and agencies, in most cases not (yet) endorsed by Cabinet, but in some cases already being applied in practice, have created anxiety to international and PNG investors. These include proposed monopoly trading arrangements, for example for rice, foreign ownership and licensing restrictions for a wide range of businesses, export licensing in agricultural crops and proposed sector governance arrangements, uncompetitive or preferential tendering or license and permit issuing arrangements, unsuitable minimum wage determination arrangements, encroachment of government into ownership and management of commercial businesses, including resource projects, and breakdown in distinctions between regulatory and operational roles, plus the overnight revaluation of the kina by BPNG, etc. Likewise continued Business As Usual, with respect to SABLs, demonstrates the need for implementation, not just statements by Government. Likewise, the EITI process will require firm ongoing commitment to implemented in a timely and effective manner to the satisfaction of the international ‘regulators’ and the benefit of the PNG community. Clearly, rules need to be reviewed and reforms made, where necessary, including to encourage more competitive markets, level playing fields and greater public good. Businesses do not necessarily welcome change, especially where already enjoying comfortable niche conditions, however, where it is even-handed, fair and transparent and justified, businesses overall would welcome the changes, given a suitable transition or compliance with the duration of existing investment or license conditions.
The construction boom in a few of PNG’s major urban centres continues, albeit winding down, but fuelled by available credit, resource project landowner investment and accumulating superannuation fund capital.

During 2013 and first half of 2014 economic growth in PNG weakened, as the construction phase of PNG LNG wound up and in the face of both lower commodity prices over recent months and reduced production from some of the country’s major mines, both as mines (and oil fields) mature and in the face of production disruptions and higher costs associated with the weaker kina. Even the rebound in coffee production and value during 2014, in the face of stronger coffee prices, was more subdued than expected, whilst cocoa, also enjoying firm prices, continues to be hamstrung by the virulent cocoa pod borer, severely reducing production in major producing provinces. Relatively low prices for vegetable oil, was exacerbated by the fire in the coconut oil mill in Rabaul preventing most local processing for many months. Other agricultural crops suffered low prices, combined with ongoing handicaps, such as inaccessibility with continued poor transport infrastructure and services, and disruption to subsidised freight services for rubber in Western Province, with the continued dispute between government and the PNGSDP. However, growth was shored up by an expansionary fiscal policy, notably with an array of construction activities, notably for transport and sports infrastructure in NCD and some other infrastructure in Lae and other centres, albeit in many cases delayed by limited project planning and implementation capacity. Furthermore, the commencement of LNG exports ahead of schedule will provide a stimulus to the 2014 growth rate, albeit that there will be limited tangible benefit to the PNG economy, in terms of local economic activity, employment or revenue during 2014. The weakening of the kina, as new foreign investment declined with the completion of the LNG construction and lower export prices and values, raised import prices and business costs and CPI. However, it did result in improved kina prices and therefore incentive for export crops, at least until the Central Bank applied an overnight nearly 20% revaluation in June 2014, imposing an unexpected price shock on agricultural exporters (and tourism operators).

Construction, which showed the strongest sectoral growth of GDP from the late 2000s, dropped back from 2012, despite the ongoing though more subdued urban building boom, and the publicly funded infrastructure projects. The oil and gas sector, which had shown steady decline since 2005,
grew strongly from 2012, and is expected to grow by a phenomenal 350% in 2014, although the impact on wider GDP is relatively limited. The growth in mining and quarrying largely relates to the Ramu Nickel (nickel-cobalt) mine finally coming on-stream, despite ongoing disruptions. Retailing, wholeselling and transport have all experienced significant checks or downturns to their level of activity, although some businesses have been markedly less affected than those which had been more directly supplying or servicing the LNG construction.

**Employment:** After positive formal sector employment growth since the early 2000s, rising to an estimated 10.5% total growth in 2007, and 8% in 2012, the rate of growth dropped to 2.5% in 2013, with the winding down of the PNG LNG construction phase, but sustained at a positive level by the new government (partly debt financed) infrastructure projects and some continued real estate development. Non-mining growth was a disappointing 2.6%, and over mining (including hydrocarbon) employment growth declined by an estimated 8.5%. The trend was sustained into the new year of 2014, with a marginal 0.2 % decline overall and in the non-mining sector and modest 0.4% growth in the mining sector. Employment growth had been concentrated in certain main centres and provinces during the LNG construction, including NCD and Central province, Lae and Morobe province and parts of the Highlands regions including Hela province. Likewise when construction concluded it had an immediate impact on jobs in those centres, although the government’s construction expenditure on roads and sports facilities in NCD, and Lae roads, for example, is designed in part to alleviate the impact.

With the gas industry providing limited employment once production commenced, further substantial, although temporary, work will be generated only from development of further trains of production from additional gas fields by existing or other operators, such as Total and partners in Gulf province, or Exxon or Talisman from Western province fields, and/or offshore fields. Sustained
employment generation in the formal and informal sectors will depend upon developing and sustaining suitable investment and business conditions particularly for viable agriculture and other economic activities, combined with suitable provision of public sector, including infrastructure employment and public and private support for education and appropriate skills development.

Papua New Guinea’s formal sector remains small and, despite growth over recent years, remains inadequate to meet the needs and expectations of PNG’s rapidly growing population (with its high growth rate recorded at 3.1% p.a.). The labour market suffers from intermittent bulges, such as LNG construction, where shortfalls of skilled labour are met by overseas staffing. It is impossible to attune supply fully with the shifting skills required by employers, but creating improved investment conditions for longer term formal and informal employment opportunities and better adapting the education and training capacity to meet the market needs with a suitable skilled and adaptable workforce will be critical over the next years. Over the past decade the school intake has increased considerably, especially for girls, but with oversized classes and inadequate teachers and oversight, standards are severely deficient, and students, particularly male students, are eager to secure more readily available practical skills training.

A new minimum wages determination was introduced in 2014, raising minimum wages to 3.20 kina per hour (from K 2.17), to be further adjusted over the next two years, with some exemptions for agriculture and capacity to pay. The cost of living, particularly in the National Capital, is extremely high, but there is concern that the capital’s costs should not determine wage rates across the country. The impact of the new rate will need to be monitored closely, with a fear that it will further stymie or reverse needed employment growth, particularly in the main sectors, such as agriculture, or that it will be applied only by certainly formal employers, further undermining the necessary ‘level playing field’ of conditions for investment.

Demographic data is largely unavailable, outdated or unreliable for PNG. The INA has undertaken an extensive survey during 2014 of the formal, informal and unregulated labour market (including private and public sector) in PNG, with results due in December 2014. This should provide extensive data to contribute to more informed policy development for employment, education, training and skills development into 2015. The paucity and long delays in provision of population, total employment, economic and related income and expenditure data from the National Statistical Office handicaps sound and timely planning and analysis. The provision of timely and accurate demographic and economic data has long been under-recognised by the PNG Government, but this needs to be addressed as a priority.
Commodities and markets: Commodity prices for PNG’s exports have experienced mixed trends during 2013 and 2014. This has partly reflected uncertainty over the direction of the global economy, whether in recovery mode or potentially slipping back into recession, and partly over the supply and demand scenario for individual commodities, related, for example, to regional conflicts and other supply constraints, and the development of new technologies and supply sources, which for example have converted the US from an energy importer to exporter seemingly overnight. Although off their peak levels of 2008 and 2011, most commodities remain above their recent historical averages, although some agricultural commodities, such as rubber, tea and some vegetable oils, have been in
a downspin for some time, and several commodities, including copper, gold and oil have seen heavy falls over recent months in the face of global market uncertainty, including the lower Chinese economic growth rates and questions over the strength of its economy, and the robustness of the recovery of other major developed and BRIC economies.

The minerals (including hydrocarbons) largely regained near to their peak levels by early 2014 in kina terms, but gold, copper and oil, PNG’s long standing main three export earners, continued their downward trajectory during 2014. Agricultural crops, coffee and cocoa enjoyed strong rebounds in 2014 (partly based on poor market conditions in other major producing countries); palm oil, coconut oil and copra enjoyed short-lived recoveries, assisted in kina terms by the falling kina, but prices tailed off again, and, as stated, processing capacity for coconut oil was disrupted by a factory fire. Other less major crops for PNG overall, but still dominant cash crops locally, such as tea, rubber, sugar (for domestic consumption) have experienced sharp drops in prices, and some have fallen back nearer to historic averages, before the price recoveries of the 2000s.

As a primary producer, Papua New Guinea, almost uniquely in the East Asia and Pacific region, was a net beneficiary from the high commodity prices prevalent (although fluctuating) since 2007, and with the majority of the population still engaged in agricultural production, many benefited from improvement household incomes. However, with various constraints to production and market access many farmer households have been disinclined to invest, or failed to achieve their potential from farm investment and management. This constraints include poor and, in many cases, impassable or non-existent transport infrastructure, poor market infrastructure and support, e.g. for fresh or processed products, and the prevalence of a few major pest and diseases, and limited research, extension or quarantine support. Cocoa pod borer (CPB) has devastated production in some of the main producing provinces, like East New Britain, where cocoa has long been the backbone of the economy. CPB (and most other pests and diseases) can be controlled and output and farmer incomes actually improved markedly, but this requires access to information and quality planting material and other suitable support and readiness to make the appropriate investment and commitment.

Although the major economic activity for the majority of the population, both in the formal and smallholder sectors, agriculture has long underperformed, partly as a result of relative oversight and unconstructive interventions by successive governments and officials. For many years palm oil has been the most consistently performing agriculture industry, through its combination of private investment and support for smallholder outgrowers, and they have made major commitments to developing standards and accessing niche markets for ‘sustainable palm oil’, particularly in light of PNG’s relative high cost structure. Yet, although less affect by government’s interventions or deficiencies, even palm oil’s prospects in PNG are dependent upon sound and consistent policy measures, and the industry is concerned over ill-advised interventions and oversight.

There have been winners and losers, from the mixed prices and falling kina exchange rate over the past 18 months. Studies over the past 30 years have found that poverty in PNG particularly relates to inaccessibility to markets and services, notably through remoteness. However, more recent finding have demonstrated tangible poverty, notably in terms of inadequate food intake and other indicators, in some of the major urban centres, notably NCD, with its very high cost of living and inequitable household income. The recent depreciation of the kina, until the June revaluation by the
BPNG, was safeguarding competitiveness and incomes to agricultural producers and some other industry participants (e.g. in tourism); it was, however, raising costs, particularly for lower and fixed income households in urban areas, at a time when city authorities were also undermining household income options and demolishing extensive settler living areas. This situation is exacerbated by the lack of formal social protection arrangements in PNG, except a pilot initiative in New Ireland province, and plans for launching such as scheme nationwide, maybe linked in due course to the planned Sovereign Wealth Fund.

Recent high commodity prices and weak governance have also fuelled speculative land and resource grabbing (using, or rather misusing Special Agriculture and Business Leases - SABLs), marginalising the rights of customary resource owners, but also restricting options and potentially undermining genuine investment and resource management initiatives. Lack of rigorous process, requiring customary landowner consultation and free and informed consent, invariably undermines prospects for successful project development, as well as disenfranchising rural households of their land, forest resources and economic opportunities, further driving them towards resettlement in urban areas. The recent Commission of Inquiry and government commitment to foreclosing on these SABLs has not yet addressed the problem, but at least strengthened the hand of the customary landowners, who have made progress in some cases through the Courts.

With progress, finally, in recent international summits (New York 2014) on climate change and forest resource management, and new target ceilings and mechanisms due in the 2015 Paris Summit (successor to Kyoto), and with preparatory inventory and operational arrangements progressing, there is now potential for a tangible market for forest carbon, which could pay forest landowners for maintaining forest and other eco-services.

**Evolving commodity markets and Development Models:** China and to a lesser extent the other BRIC nations’ role has increased greatly in recent years, reflecting their size and rapid economic growth. China accounted for over 40% of global base metal demand in 2010, including 40% of world copper production, 23% of agricultural commodities, including 60% of soybeans, and 50% of global cotton production and 40% seafood, and 20% of energy, with a further upward trajectory before stabilising. Far more than India, China’s development has been heavily driven by trade, being the world’s largest exporter in 2010, with 11% of world exports and second largest importer, largely of raw materials, at around 9% of imports, providing a valuable balance of accumulated foreign exchange reserves. Monitoring changing demand patterns by China will be critical for exporting countries like PNG, particularly as China shifts progressively to importing to meet its own massive domestic demand, rather than for manufacturing for re-export. However, with growth having been declining in recent years and debt levels rising (to 250% of GDP in 2014; levels prevalent in some troubled developed economies), there are risks of defaults and even wider crisis, controlled market deflation. Although a substantial supplier of some commodities, such as polluting coal, China is heavily dependent on imported metals, much of its energy and substantial food quantities and has been actively seeking to improve access, security and, in some cases, ownership of supply sources. Even with uncertain global markets, and a more subdued Chinese market, the level of potential sustained demand, particularly for less polluting energy sources, such as LNG, is likely to be sustained, even if some commodities fall into less demand for periods. Global commodity prices will be increasingly influenced by the evolving demand from China and other BRIC nations, as well as changing technologies, and requirements to comply with global emissions and other ceilings.
The PNG Government introduced the Responsible Sustainable Development Strategy in 2014, to shift the focus economy and social development away from resource extraction, to greater value adding, more emphasis on sustainable industries, greater community empowerment and participation, including restrained population growth, whilst safeguarding the country’s still relatively pristine natural environment for the future generations. Increased global, including East Asian demand for PNG’s resources poses opportunities and risks. PNG needs to apply rigorous and universally relevant social, environmental and labour standards and investment conditions, and have access to internationally recognised professional advice for firm and transparent negotiations in the country’s best interests, rather than readily conceding uncompetitive or concessionary investment conditions, for example with extended tax holiday or exemptions to local employment conditions or environmental standards. PNG should develop its resources progressively at its own pace and aligned with its own absorptive capacity, ensuring maximised local participation and benefits, including local employment and institutional strengthening, whilst it is crucial that extraction is not at the expense of its natural environment, which provides the livelihood for the majority of the population and a unique basis and opportunity for broad-based economic development, including producing goods and services for consumers in already polluted and degraded countries.
Tea Prices US Cts/Kgs 2002-Sept 2014

Hardwood (meranti) log prices (to Japan) USD/m3 1992-Sept 2014

Commodity Exports - Quantity 1999-2013
('000 tonnes or specified) (BPNG, Treasury and Commodity Boards)

Export Destinations and Value 2011-2013
(BPNG) (kina mill)
Production and Trade: Despite strong prices for many of PNG's export and import replacement commodities in recent years, apart for LNG, and the new mining products, nickel and cobalt, and, in the renewable resources, palm oil (apart from lower output in 2012-13), timber and marine products, which have each shown upward trends, the other main commodities have been declining in production or at least showing a stable trend.
Copper exports have been in steady decline since 2005, from 226,000 tonnes to 93,000 tonnes in 2013, as Ok Tedi production was progressively exhausted and latterly organisational and ownership disputes arose. Oil exports have declined from 30.6 mill barrels in 1999 to a mere 4.3 m barrels in 2013, as the Kutubu-Gobe fields developed from 1992 were progressively exhausted. Even gold exports, the dominant item in PNG’s export trade for most years and revenue since the 1990s, have declined from 70.5 tonnes in 2005 to 55 tonnes in 2013.

Of the agricultural crops, coffee, the traditional main export crop, until surpassed by palm oil, but still produced by far the most farmers, exports were was 79,200 tonnes in 1999, but down to 48.2 in 2013, albeit recovering somewhat in 2014. Cocoa, hit initially by the loss of much of Bougainville’s production in the late 1980s through the 1990s, combined with a failed initial hybrid in, was recovering firmly in the 2000s until devastated by CPB in several main growing areas from late last decade. Exports fell from 53,800 tonnes in 2008 to 38,700 in 2013. Coconut oil and copra exports, traditionally the backbone of the coastal and island economy, fell back from 62,000 to 13,500 tonnes and 32,500 to 15,800 tonnes respectively between 2008 and 2013, as the effects of low prices and deficient shipping services sank in. Likewise tea and rubber, important local cash crops and household income providers for a large portion of the local population in the Western Highlands and some lowland areas (notably Western and Central provinces) saw severe export declines over recent years. Combined, this makes up a substantial loss of economic activity and employment, including in PNG’s rural areas, and highlights strong deficiencies which require urgent attention by Government, working together with the private sector and wider community.

Clearly the commencement of LNG exports from May 2014 will dominate export statistics, although the initial impact on the PNG economy will be limited in the early years, and even then it’s largely only government and relatively few landowners. Palm oil planting and replanting have proceeded constantly, with production increases ensuing from projects complying with certified RSPO standards, for exclusive access to the certified market. Other new plantings have proceeded in parts of the country, notably on land designated as SABLs and in a manner non-compliant with RSPO social and environmental requirements. This may jeopardise market opportunities for their crop, as well as damaging the reputation of PNG palm oil, unless the government applies RSPO-equivalent requirements on new palm oil proposals and the land which they propose to utilise.

The PNG oil palm industry has been the country’s most successful agricultural activity in recent years, thanks to major investment in land and plantings, processing and marketing facilities, research and innovation, including plant breeding, skilled personnel and standards and suitable partnerships, including with smallholders and government. However the industry remains sensitive to price and factors which raise domestic costs and reduce kina returns, such as currency appreciation, which jeopardise its competitiveness. Apart from new projects which may not comply with these standards, other interferences in the industry, including proposed regulatory arrangements, along with new wage rates, add risk and potential costs. The recently conducted, but long overdue review of the palm oil pricing formula, which determines outgrower prices paid by the milling companies should provide extended stability to outgrowers and companies alike into the future, but its application needs to be monitored and periodically reviewed.

The increased log exports reflects both stronger prices, weak oversight, but especially easy access in recent years to new forest resources, notably SABLs, operating under Forest Conversion Areas
(FCAs), obtained without due consent from customary landowners under special agricultural and business leases (SABLs), purportedly for agricultural projects. These FCAs now make up roughly 1/3 of the log exports. With 5.2 million hectares, obtained over the past six years as SABLs, largely without the owners’ free and informed consent, this back door mechanism largely to obtain timber, sidestepping the requirements for forestry projects under the Forestry Act, has been subject to extensive public scrutiny, and legal actions by some landowners, but with limited practical on the Government’s part, to date in rectifying the situation.

In the case of minerals and hydrocarbons, the improved market (and since the early 2000s, investment conditions) encouraged increased investment in exploration and several major and smaller-scale projects being planned and in some cases developed, or extensions and new phases proposed, as with Ok Tedi. Until the commencement of LNG production, mining and hydrocarbon output has remained dominated by a few, largely aging, operations, notably Ok Tedi, Kutubu oil, Porgera plus the somewhat more recent Lihir gold mine. Mining overtook agriculture for export earnings in 1984 and mining and oil have dominated export earnings since, with gold exports being the main export for 11 out of the past 13 years, followed by oil, particularly the early 2000s before the operating fields were increasingly exhausted, and by oil, agriculture or copper in the other years; copper was the main export for the other two years, 2006 and 2007.

Although mineral and oil/gas prices remain generally well above those prevailing before 2005, attention in PNG is focused particularly upon the country’s extensive gas resources, and exploring and developing new fields on the back of the success of the first, now operating project. There is much greater uncertainty in terms of mining exploration and development, with the recent nationalisation of the Ok Tedi mine and talk of reviews of mining laws and other factors combining with the lower prices and market uncertainty, particularly over the prospects for Chinese demand, and concerns over PNG governance and economic management issues, discouraging exposure for further investment at this stage. It is widely reported that mineral prospectively in PNG is very high, but that political and governance uncertainty imposes a severe negative dampener on further investment, encouraging investors to put new plans on hold, for the time being, and perhaps focus on prospects overseas. So, although a few mining operations have commenced production in recent
years, albeit belatedly in the case of Ramu-Nickel, some major projects have effectively been put on hold for the time being.

Mining and petroleum have also provided a major, though volatile portion of total tax revenue, depending greatly upon prevailing prices and profitability. A few projects have enjoyed extended tax holidays, deferring contributions from mining tax, although, where the state holds equity, revenue to national and provincial governments and landowners may be gained in advance through dividends, as well as through payroll tax, and some indirect taxes. The PNG LNG income will initially be deposited into an ESCROW account controlled, in effect, by the project financiers revenue, until they are fully satisfied the project is fully operational, but merely replacing revenue from old mining projects. Some dividend revenue is expected to commence in 2015, but tax revenue from the project is not expected to commence until late 2015, and more substantial revenue until 2017/8, building up into the mid-2020s, although it is forecast that the capital investment in the PNG LNG project will largely have been recovered by the investors within the first few years of operation.

The minerals industry (including oil and quarrying) was estimated as comprising only 13.5% of GDP in 2013, and forecast by the Treasury to rise to 19.5% in 2014 (following commencement of LNG exports in May), rising to 27.5% in 2015, the full year of LNG production. In contrast, however, minerals/oil provided 88% of export earnings in 2007, slipping back to 73.5% in 2011, and back up to 79.5% in 2013; a figure which will increase substantially further in 2014 and beyond as LNG exports are added.
By contrast agriculture, forestry and fisheries were calculated at providing 32% of GDP in 2009, slipping to an estimated 26.6% in 2013, with lower agricultural production and prices, and forecast by Treasury to drop to 21.9% in 2015, the first full year of LNG production. Agriculture, forestry and fisheries exports comprised 26.5% of export value in 2011, falling to 20.5% in 2013, with the lower prices and quantities prevailing.

Gold comprised 45% of total export earnings in 2009, slipping back to 36% in 2011 and 40.6 in 2013, against copper at only 34% in 2006, 19% in 2011 and 11.4 in 2013, and oil with 31% in 2001, 22.5% in 2008 and 15% in 2013, despite relatively strong oil prices at the time.

The first three months of 2014, left gold, copper and oil with 40.5%, 10% and 19% of total exports respectively. Agriculture, forestry and fisheries together comprised 23% of exports for the first three months of 2014, admittedly the off-season for some major copra and will be constrained further if global prices for some crops, from palm oil and other vegetable oils remain depressed, diseases, such as CPB fail to be controlled with rigorous new farm management systems and sector governance and incentives not improved vigorously. The major agricultural export crop, palm oil increased from 3% of total exports by value in 2006 to 9% (K1.5 billion- 572,000 tonnes) in 2011, but with substantially lower prices in 2013, it was down to 7%; (actual export value is higher when incorporating refined palm oil). Exports quantities will likely rise during this decade, assuming viability is sustained, with some new oil palm schemes and areas being planted. Maintaining market access and the reputation of PNG’s product on the world market will be a major challenge with some new projects not having the commitment to sustainability criteria and apparently the result of forest/land grabbing arrangement, which would not be RSPO compliant.

Coffee export value slumped from 6% to 2.5% of total exports between 2011 and 2013 (from K927 million to K337 million), on the back of low output and prices, but there has been some recovery in 2014 with stronger prices and a more modest recovery in quantity. Cocoa slipped back from 3 to 1.5% of exports from 2009 to 2013 (K338-206 million), despite still reasonable prices. The number of PNG households dependent for income and employment directly or indirectly upon these agricultural crops (in formal and informal sectors) far exceed those in the extractive industries, with nearly half the households, and markedly more in the Highlands region, in coffee production alone.

With gold and particularly copper exports remaining subdued by continued lower prices and relatively aging projects, their prospects are dependent upon the uncertain direction of metals and wider commodities markets, and investment decisions with respect to several major projects, notably Wafi-Golpi copper/gold mine in Morobe province, the long heralded Frieda copper mine in West Sepik province and plans and capital for the next phase of Ok Tedi, plus some smaller new projects in Madang and other provinces. The nickel-cobalt project and processing facility in Madang province, commenced belatedly during 2012, with various subsequent stoppages, associated with landowner and labour issues and experiencing low, if consistent and predictable prices. From May 2014 the two trains of LNG from the gas fields notably in Hela province (initially) became the
predominant export earner by a long margin, to be joined potentially later in the decade, or next decade by additional trains from supplementary fields in Western, Gulf province and adjoining provinces, and offshore.

Global staple food prices spiked in 2008, at the time of the global commodity price boom and speculation over imminent supply shortfalls. They have subsequently remained relatively stable albeit marginally above pre-2008 levels, stimulating some more investment into research and agricultural production, including in some fruit, vegetable and livestock projects in PNG for the local market. Forecasts of El Nino conditions in 2014 encouraged some build up of food stocks, whilst the lower kina exchange rate in the second half of 2013 and 2014 imposed some dampening on food imports and incentive for local production.

PNG’s Exclusive Economic Zone (EEZ) for fisheries is harvested largely by offshore-based international licensed vessels. Since the mid-1990s an increasing number of overseas operators have based part of their fleet in PNG, and established local processing facilities, exporting a portion of their catch from PNG, particularly to the EU market using preferential access under PNG’s interim EPA’s. Exports were recorded for 2012 at 71,000 tonnes, valued at K329.5 million, but perhaps oddly reduced to 46,000 tonnes, K239.4 million, but this greatly understates the value of produce harvested in PNG waters, with the revenue substantially provided from license fees, but without the catch being landed onshore. Domestic fish canning and other processing facilities have been concentrated in Lae, near Madang and a small loining facility in Wewak, with an aim being to gain greater economies of scale through a shared facility on the Madang coast, although widely opposed amongst local coastal village communities. PNG’s own long-line fishing industry developed in the 2000s, but suffered from high operating costs and marketing constraints. The sustainability of PNG and the Western Pacific’s valuable tuna resource is dependent upon effective research and the industry’s effective management and oversight, and upon safeguarding the health of the oceans and PNG’s archipelagic waters, including the retention of extensive non-fishing, or marine protected areas, to safeguard marine stocks and habitats.

Major further investment has occurred in fish processing capacity in PNG in recent years, seeking to take advantage of the preferential access arrangements with the EU market. However, concerns that some plants are merely a vehicle for accessing the PNG’s EEZ (and the resource under the Nauru Agreement) using essentially still distant water fleets, which process largely offshore, is threatening closer EU oversight and may potentially undermine the beneficial trade status, as well as resulting in over-harvesting of some tuna species in PNG’s waters.
Annual Visitors to PNG - 2005-2013 (TPA)

PNG Visitor Numbers by Purpose of Visit
2011 and 2013 - %age

Holiday Visitors 2013 - %age (Source TPA)
Overseas visitor numbers were recorded as rising from 52,000 in 2002 to 182,200 in 2013, but of this only 41,343, or 22.7% identified themselves as bona-fide tourists, with 58,700 (32.2%) stating they were on a business visit, 71,000 (39%) coming for employment (including projects like LNG construction), and others visiting family and friends or for educational purposes. Apart from statistical errors, despite firm growth in the market, associated with trekking, other cultural and adventure tourism (cultural shows, diving, bird-watching and surfing), plus an increasing number of cruises, this remains a relatively small number in relation to major Pacific tourism destinations, like Fiji, Vanuatu and Samoa. Despite the country’s immense natural and cultural appeal, it still remains largely off-limits for the tourism trade, owing to high costs, limited tourism infrastructure and services and perceived risks in some centres and localities. Regional visitor numbers may have lifted modestly in 2014 with the Melanesia Festival of Arts and Culture and in 2015 associated with the Pacific Games.

Log and processed timber exports leapt to K768 million in 2011 (4.5% of exports) from K410 million in 2009, a 170% increase in quantity to 3.5 million cu metres, substantially on the back of unsustainable forest clearance in the guise of agricultural development. With the industry notoriously prone to transfer pricing and its statistics problematic, these figures, based substantially on prices quoted by operators, will no doubt understate reality.

**Economic Indicators and conditions for more sustainable development**

**Debt:** Public debt to GDP was reduced from 72% of GDP in 2003 to 23.2% by the end of 2011, largely through economic growth, but also progressive debt repayments. However, by late 2014 it appears to be nudging back towards 40% of GDP, in excess of the prudent ceiling set under the Fiscal
*Responsibility Act.* This excludes the major commercial borrowing during 2014 parked outside official public debt, including for equity acquisitions outside the State equity option allowed under the mining and petroleum/gas legislation, as well as major ongoing contingent liabilities and other debts, including to superannuation funds, which together would take combined debt into the 50%+ of GDP mark. This remains modest in relation to the level accumulated by many major developed and emerging economies, including Japan, the US and China. However, PNG’s economy is much narrower-based than these, and subject to market risk. PNG GDP will certainly be growing strongly in the next 18 months, but GDP growth in PNG, particularly sourced from extractive industries which are majority foreign-owned does not equate to revenue, at least not for several years. Capacity for servicing major debt will be heavily restrained, at least initially, so it will be crucial to both firmly limit borrowing so that it relates to priority expenditure which generates broader-based economic development (including maintaining and upgrading essential infrastructure) and other core public goods, and not overpriced or white elephant national or district projects, or expenditure which is essentially self-perpetuating.
Inflation: The decade to 2002 exhibited extreme volatility and periods of high inflation. Inflation was reigned in during the mid-2000s, but jumped above 10% in 2008, during the booming commodity prices (including fuel and food) and with weakening of fiscal restraint, during the so-called ‘windfall revenue’ and burgeoning and poorly managed trust funds. Inflation fell back in 2009 to below 6%, but remained high with the resurging commodity prices of 2010 and continued loose financial control over District grants and other trust funds.

The inflation rate fell in late 2011 and 2012, with appreciation of the kina, associated partly with the influx of investment capital for the PNG LNG project, but from lower global food and oil prices, (which make up a significant component of most production and marketing costs), and the removal of school fees under the ‘free education’ policy, introduced by new O’Neill/Namah government in 2012. Inflation rate was recorded as 1.6% for 2012, with an underlying rate deflating by 1.9%, despite the marked reticence of many traders to fully or promptly pass on the currency appreciation to consumers. Inflation rose again firmly in 2013 and 2014, forecasted at 8% headline for 2014, upon the slide of the kina in 2013 and 2014, associated heavy local debt financed public expenditure,
together with lower commodity prices and export receipts and the discontinued influx of investment capital upon the completion of the LNG construction phase. Reduced domestic demand provided some offsetting effect. THE Central Bank’s forecast for 2015 is for headline inflation of 6.5% and 5% for 2015 and 2016, although higher rates would occur with further unplanned government expenditure, continued kina depreciation, which could occur in 2015, factors such as an extended El Nino effect, or imported inflation, e.g. emanating for energy supply shortages etc.

It has long been recognised that the basket of goods and services which make up the Consumer Price Index needed to be updated to reflect modern expenditure patterns. With the results of the 2009 Household Income and Expenditure Survey (HIES) finalised in 2014, the CPI basket has now been updated, and the CPI should be more relevant (incorporating products, such as ICT devices, which didn’t exist in the 1970s when the former CPI basket was drawn up; plus better reflecting up accommodation costs). However, in the process there is invariably some transitional variation in the data set. Inflationary pressures in different centres in PNG varies, which higher food and accommodation costs generally in NCD. The revised CPI has added 3 additional urban centres to the sample.

High demand and lack of available urban land and accommodation has pushed urban accommodation costs to astronomical levels. This has occurred particularly during the urban boom periods of the LNG construction phase, and with the push-pull factors from neglected rural areas, and acerbated by the inclination of urban authorities to destroy extensive prevailing living areas in squatter settlements, which much of the cities’ workforce inhabits. Pressure for the high end accommodation, including short term residential premises, has diminished over recent years with the completion of extensive new townhouses, apartments and hotel premises, and the lower demand following completion of the PNG LNG construction phase. Rents remain high, even by the standards of high cost developed country cities, like Sydney, although coming well off their recent peak.

Low to middle income accommodation to buy or rent remains at a premium, and, until large numbers of affordable and legal land titles and housing become available, and more formal and satisfactory informal urban employment consistently available, the squatter settlements must remain the urban housing of necessity, if not choice. Available accommodation for staff is a major issue for business and government, as well as for households themselves. Major land and housing schemes are being promised by the government, but unless unit construction costs and land prices can be kept well down, they will probably continue to fall well beyond affordability for most lower income earners, otherwise result in a US-style housing bubble and debt crisis, if unduly cheap and accessible finance was readily available for otherwise unaffordable premises. Well-coordinated and sympathetic strategies are required to address this problem which was allowed to accumulate, and become a substantial challenge to households, business and government. It requires particularly the empowerment, rather than harassing of households, and partnership of public and private, including household, capital, including ‘sweat equity’.
Interest rates: Interest rates remained low from early 2004, but higher inflation rates forced the Bank of PNG into tightening monetary policy in 2008, nudging interest rates up, with the Kina Facility Rate raised to 8%, to absorb some liquidity and dampen bank lending. From late 2009 the KFR was reduced to 7% until mid-2011 when BPNG progressively raised the Rate back to 8% in June 2012, over concern over the high level of liquidity, but the Bank eased monetary policy again in the 3rd quarter of 2012 following the low inflation figures early that year. The growing Budget deficit in 2013 and 2014 was substantially funded through domestic debt instruments, which also absorbed some of the excess liquidity, but also pushed up domestic interest rate, and hence also future public debt servicing costs. Mechanisms for on-selling of the debt to the public directly have been introduced to restrain this increased cost of debt, although the update has been limited.

The kina exchange rate: the kina depreciated heavily against all currencies in the 1990s, contributing to the heavy inflationary pressures, but also safeguarding the beleaguered agricultural industries, suffering from low commodity prices. Exchange rates during the 2000s have remained relatively stable, appreciating briefly with the high commodity prices for PNG’s exports in 2008, but then through 2011 and 2012, during the further period of strong commodity prices and the construction phase of the USD 19 billion PNG LNG project, when substantial capital was brought onshore. Since the peak of that phase in August 2012 and with steadily declining commodity prices the kina slid particularly against a strengthening US dollar during 2013 and early 2014, until the Bank of Papua Guinea intervened both to reduce the spread in foreign exchange trading by the commercial banks
and shore up the kina. The trade weighted exchange rate fell 7.4% from August 2013 over the next
12 months benefiting exporters, including agricultural industries, but adding to imported inflationary
pressures and the cost of living and to general business costs.

The Central Bank’s intervention, effectively revaluing the kina sharply, reduced prices to exporters
and some other businesses, but also imposed unexpected costs to some traders which had already
purchased and shipped produce for which they were yet to be paid. Importing companies gained
from the process, which also helped stem inflationary pressures. However the subsequent restraint
on available foreign currency over the second half of 2014 has delayed timely overseas payments
and added administrative tasks. The process of seemingly supporting the currency against market
pressures has also reduced the foreign exchange reserves, a scenario which could not be sustained
over any extended period without the underlying pressures from high imports and limited export
earnings being relieved.

With continued deficit financing in 2015 and commodity prices likely to remain well below their
2008 and 2011 peaks, it will be necessary to restrain that deficit and focus public expenditure on key
priorities, of providing and upgrading basic public services and infrastructure, and avoiding the
recent level of investment in some relatively marginal infrastructure projects and poorly planned
and managed district expenditure, although some level of continued fiscal stimulus is still entailed to
help maintain economic activity. Some revenue from LNG is expected to flow from late 2015,
potentially providing some level of relief on pressured foreign exchange.
Balance of Payments: PNG experienced a positive balance of trade in goods and services until 2009, when the major importation of plant and skills for the PNG LNG plant/equipment commenced. The current account deficit peaked in 2013 (at K7.4 billion), with the final plant and equipment for the LNG project and the commencement of the government’s deficit-financed works projects, and with exports also subdued by weaker commodity prices and low production. The 2014 deficit is expected to fall to K1.7 billion, as LNG exports have commenced (ahead of schedule) and LNG construction has concluded, leaving only weak (other) exports and the government’s fiscal stimulus expenditure. The associated weakening kina will also have dampened imports.

The current account deficit has been offset by a large positive balance in the capital and financial during these years, leaving a modest positive balance of payments in 2010 and 11, but an overall deficit for 2012 to 2014, rising to a hefty K1.6 billion in 2013 and dropping to a small deficit for 2014 (projected at K196 mill), together with reduced foreign exchange reserves.

With the first full year of LNG exports in 2015 and likely reduced imports, barring the start of developing any major additional trans of LNG or other major capital project, but continued unspectacular export performance from other industries, a solid positive trade and balance of payments balance should be restored as the year progresses, with a recovery also in foreign exchange reserves by the year end.

Foreign exchange reserves, which had been exhausted on successive occasions in the 1990s, built up progressively during the 2000s, reaching K9.3 billion by the end of 2011, or 11.5 months of total import cover (or 16.7 months of non-mineral cover). By the end of 2013 they were at K6.7 billion, or 7.1 months of total import cover, and for 2014 BPNG is forecasting reserves to have fallen to around 6.2 billion kina, comprising only 4.6 months of total cover (or 7.8 months of non-mining import cover). Reserves are expected to recover by the end of 2015 to 7 months total cover or more, barring any major external or other shocks and prudent levels of public expenditure.
Fiscal Management: Government revenue (excluding grants) reached nearly K8.25 billion for 2011, of which about 96% is from income taxes and 24% from mining and petroleum taxes, rising to a projected K9.5 billion for 2014, significantly below (perhaps K240+ million) original Budget forecast, largely owing to low commodity prices and production from mining projects (leaving mining tax, which was expected to provide over 10% of tax revenue, with near 750 and despite income tax receipts being above forecast. Grants from development partners, plus dividends and some other property income make up the balance of revenue, together with a forecast K8.27 billion of gross borrowing, financing PNG record K15 billion 2014 expenditure Budget. The deficit for 2014, made up from net borrowings, largely from the domestic financial market, is expected to reach K2.7 billion, with National Departments expending K9.1 billion, provinces K3.3 billion, Bougainville K260 million, Statutory authorities and SOEs (which should be generating revenue) spending K167 million and debt servicing consuming a substantial K763 million and tax credits a further K139 mill. As in 2013, allocations in 2014 in what used to be termed the development budget, was substantially under-expended with weak planning and implementation capacity at both national and sub-national levels. Expenditure in the recurrent budget, which makes up the core functions of government, providing maintenance and provision of basis services, has been over-expended, partly owing to under-budgeting (e.g. for agreed teachers’ pay increases) and partly from deficient management and cost control, including on wasteful overheads, including incessant overseas travel etc.

With the second year of major budget deficit, partly to maintain economic stimulus following the conclusion of the LNG construction, and to help restore and develop the nation’s infrastructure and long neglected and undeforming services, it will be necessary to better focus that expenditure in 2015 to achieve more constructive effect on reviving private business and investment and investing in PNG’s human capital. Borrowing against future earnings is justified so long as it’s within prudent fiscal limits, not unduly risky, in terms of ceilings and future prospective revenue, borrowed at low (preferably concessional) rates over a suitable duration, and other prudential guidelines, and expended for productive activities, notably to enhance broad-based and sustainable economic
activity and the stock of human and the country’s needed physical capital. Borrowing should be for core government functions in providing public goods and services. These criteria do not entirely apply to the 2014 deficit, and commercial borrowings, and government would be advised to apply such criteria in 2015 and 2016 when again running likely deficit budgets (forecast by Treasury at K1.3 billion and K1.2 bill respectively).

Ensuring a more transparent and accountable budget process, right down to the much flawed current district grants, requires strengthening not only the planning, implementation and internal oversight mechanisms, including timely release of allocations and budget data, right down to the local levels, but also adequately funding and empowering the official and community watchdogs, to be effective in raising awareness and holding officials and leaders accountable. This also requires shifting expenditure control away from mechanisms which entail political or other patronage at the national or local levels and toward routine, reliable and accountable public administration mechanisms.

The State-owned enterprises must be more clearly devolved from the government financial drip and be more commercial and competitive, with their dividends paid to government and not retained in some quasi public investment fund. Greater use of competitive investment and public-private partnerships will be necessary to ensure adequate capital and performance in delivering an improved and adequate level of utility and other service provision, including for power, the internet gateway and other services.

The Sovereign Wealth Fund was legislated in early 2012 to take receipt of revenue from extractive industry projects following extensive industry and public consultations, including in the regions. It has not yet become operational, however, as the Government reconsidered some of its functions. The modified structure for the Fund was approved by NEC in October 2014, for presentation to Parliament in the 2015 Budget session. The function of the fund, at least initially, seems to have been undermined by the level of shorter term debt accumulated against future resource earnings. Expectations of future earnings, notably from PNG LNG, appear at times to be unrealistically high, and as though they supplement, rather than largely replace, recent mining and oil revenues. In any case, to be effective and operational, the SWF needs to be managed transparently, in accordance with clear objectives, rules and targets. There needs to be a strong sense of public awareness, support, ownership and oversight, and that it is not merely seen as some new and remote government entity, to be managed and foreclosed, as was the MRSF in the 1990s. It needs to be managed in accordance with the highest criteria of the Santiago principles to be of value to the current and future population of PNG, in perfuming its functions of stabilising exchange rates, income and expenditure on priority functions, as determined, including potentially having funds for agreed development functions, and possible for a future and maybe pension/social protection fund
**Investment Conditions and Mechanisms for Addressing Industry Issues:** Key impediments to business and investment in PNG were highlighted in the INA’s 2012 Private Sector Assessment, which ranked law and order problems, corruption, the poor state of transport infrastructure, deficient electricity infrastructure and provision, availability of skilled labour, political and policy/rule instability, followed by inadequate ICT infrastructure/high costs, as the most serious impediments. The findings were similar to those of the 2007 survey, although some impediments showed improvements, such as ICT, which, although still considered a major handicap to business and investment, was deemed to have improved since increased competition and new investment commenced, initially in mobile phones, from mid-2007.

Most impediments identified, and priorities for government to address, were shared between industries and between larger and SME businesses, and also between overseas and nationally-owned businesses, although some variations were inevitable, such as SMEs being more concerned with lack of access to finance and market information than larger or international firms, for example. Corruption in land administration and the supply and tenders processes were deemed to be the most regular malpractice encountered by businesses, in terms of undermining positive investment decisions. Some details of the nature and cost of crime were included in the survey findings.

(This survey is carried out by the INA every 5 years to coincide with the National Elections and formation of a new Government. In 2012 it was supported with funding from the ADB. Full details may be found on the INA website, [www.inapng.org](http://www.inapng.org). A successor survey will be undertaken in 2017;).
Ranking of Hindrances to the Business and Investment Climate by a 6-point scale (INA Survey 2012)

1=not a problem, 6=extremely problematic

- Law and order
- Political uncertainty and stability of rules and regulations
- Variable exchange rate
- Corruption
- Inflation
- Interest rates
- State of telecommunication infrastructure
- Availability of skilled labours
- State of transport infrastructure
- State of electricity infrastructure
- Cost of inputs
- Cost of skilled labours
- Access to land and land compensation claims
- Quality and access to finance/banking services
- Company tax rate
- Cost of unskilled labours
- Inadequate subsidy/tariff support
- VAT/GST
- LLG/urban authority tax and rules

2012
2007
2002
The 2012 survey was at the peak of the LNG construction phase. Since then, the business environment has changed somewhat, both with the relative business lull and the greater focus on public expenditure to maintain economic momentum in the interim. The survey was conducted in 2012 when there was considerable political stability, and that was reflected in it being ranked as a less serious impediment than in 2007. However, since 2012 greater political seems to have become established, yet there is increased concern within at least parts of the business community over the stability of policies and rules as they may affect investment and businesses. This concern relates to agriculture, tourism, mining and other aspects of commerce, where basic laws and governance standards related to agricultural boards, licensing, foreign ownership rules and investment security, production and trading monopolies, resource tenure questions and other issues have been proposed or questioned, respectively, in political and officials’ statements, pronouncements, or actions. There has been an assurance from government, including through government-private sector consultative forums, such as CIMC and the National Working Group on Business and Investment, that consultation will occur prior to any changes or action affecting existing businesses, but in some cases prior actions already seem to have proceeded.

Prospects: PNG has a population of over eight million people by 2015, dispersed in towns and cities, but especially in villages and rural areas across a large geographical area of mountains, islands and different landscapes. This population requires a diverse economy, capable of generating both immediate and sustainable revenue, employment, income earning opportunities and the standard of public goods required for the 21st Century. The Government’s Responsible Sustainable Development Strategy provides a sound focus for such a diversified economy, which is not simply dependent upon a few extractive industries to drive the whole economy and meet rent-seeking aspirations of some. PNGLNG (and subsequent LNG developments) and other extractive industries do not provide a panacea to meet PNG’s development needs. They provide a valuable contribution for the country’s development, notably through providing medium to long term finance for the State to invest in the core physical infrastructure, and quality public goods and services and oversight systems, needed to facilitate the development of other competitive industries and human development.

PNG is well resourced, but it is not Saudi Arabia, where oil is extracted for a very low investment cost. PNG’s investment and production costs in all industries are relatively high, in the face of high costs of access, but also the limited available or reliable public goods, from roads to power, skilled workforce in many fields, reliable physical and land tenure security and consistent application of policies and rules, lack of supply competitiveness and in many cases economies of scale. The PNG population likewise suffers from limited infrastructure and effective quality public services that enable access to skills, formal sector work, basic utilities, low morbidity and mortality rates, safety, land and affordable urban accommodation.

PNG’s development process is about utilising its physical and human resources for a people-centred and sustainable development path. The extractive industries are not development in themselves, not even automatically provide it. If developed prudently they can contribute to that outcome and avoid, or minimise the inevitable negative economic and social effects, associated with Dutch Disease, or physical effects from poor environmental management and safeguards. There are widespread examples, positive and negative from international and PNG’s own past experience, for example, between countries which seem to have managed their resources better for development, such as Botswana, or latterly Timor-Leste with its firmly managed Sovereign Wealth Fund, and those,
such as Equatorial Guinea and Nigeria, where their ample resources fuelled massive income disparities, undermined other industries, notably those provided broad-based employment, or triggered extensive environmental impact, as in Nigeria’s delta region.

PNG needs to lower its cost structure, be more competitive and diversify its economy, not just as a primary producer of minerals or sustainably produced products, like agricultural and marine products, but also value-adding a wide range of products from the country from specialty foods and essential oils to carbon sequestration and payments for other environmental services (from forests and the sea), and through the service sector, which has proven the fastest growing sector in most countries for many years, including in high and lower skilled work, from ITC to tourism and hospitality, finance, insurance, education, utilities and supply and service industries, which in turn supply them.

What PNG must avoid the dual economy, of towns and rural areas, elite estates and deprived squatter settlements, of a few thriving extractive industries, but a State which fails to manage and utilise the proceeds from that extraction, and actually undermining the prospects for the other sectors, and hence also the prospects of the majority of the population. The state has a major role to play in converting the proceeds from the resource sector into investment for the rest of the economy and the population. If it is does not perform efficiently and accountably it drags down the prospects for the rest of the economy and population. It needs to partner effectively with the private sector, churches and civil society in delivering the positive outcome.

The private sector has a major to play in this service delivery function, as many private businesses, including in the mining/petroleum field already do, working alone or in partnership with government, NGOs and development partners to provide a range of other quality local services. But there are many other businesses which are relative free-riders, seeing PNG as a brief destination to make good money but without putting much back, in terms of local capacity building, paying taxes or building infrastructure to last. Doing business in PNG can be challenging in that many of the normal public goods provided by the State in other countries barely function, so some businesses invariably feel that their costs are already high enough, with back-up generators, added security measures, maintaining local access roads and communications, without also being expected to provide local health, education and training functions or working with government to develop other local infrastructure and capacity.

The government has for many years been deficient in performing its responsibilities to the wider community, but also sustaining dynamic investment conditions for the private sector to generate the range of activities and employment needed. PNG has amongst the worst social indicators in the Asia-Pacific region. It has a major catch up task to bring maternal and child mortality levels down to acceptable levels and to make education universally available, but also to extend literacy and numeracy widely to adults to empower the population to develop its own skills, talents and opportunities. The Government has made a commitment to addressing the failures of the past, and achieved progress in some fields, such as increasing access and attendance in schools around the country. The churches and NGOs provide many health and education but also air services, especially in more remote rural areas, including running the recently established Rural Airstrips Authority. Government need guidance, partnership with the private sector and civil society and to be held accountable by an empowered community, with access to information and communications and
demanding services and standards. Effective services also require coordination, as retaining professional health workers, teachers and other professionals in rural areas, requires basic access, law and order and other services to be prevalent. Services cannot be provided in isolation, and require partnerships and developing hubs of local excellence, including opportunities and services provided by the private sector.

For government and business to partner effectively requires trust and internationally accepted and verified standards, whether in mining and hydrocarbons, ISO, RSPO in oil palm, forestry and fisheries stewardship certification. The PNG government formally applied for EITI membership in late 2013, and was accepted as an applicant in March 2014. This partnership of the PNG Government, the extractive industries operating in PNG and civil society covers standards of disclosure and verification of transactions and values in minerals/hydrocarbons, but also potentially extends to other extractive industries (such as forestry and fisheries in due course, where standards of governance have sometimes been deficient). With EITI there is much work to be done to achieve compliance, and later to apply disclosure to agreements and on subnational transfers and on subsequent expenditure. These certification schemes are to apply and raise social, health, educational, environmental and other minimum standards and transparency for the benefit of the PNG public and landowners, but also for international consumers and other stakeholders, including authorities fighting transfer pricing and other international crime, etc.

On the one hand, it is the State’s responsibility to expedite legitimate processes, including contracting, land allocation, licensing, issuing of permits/visas, etc., for legitimate businesses and applicants in an orderly, timely and transparent manner, and with known deadlines, and thereby also limiting the temptation to shortcut procedures.

Prevention is better than cure, where possible. But applying a rigorous system to identify and penalises corruption, which is all too pervasive, is also critical. The PNG Government has made a commitment to establishing an anti-corruption commission (ICAC). But tackling corruption is not just about establishing a new organisation and tasking it with the responsibility of addressing a widely pervasive problem in the country. The authorities must seriously, address the on-going corruption and underlying motivating causes for corruption within political and public service ranks, which has seen the diversion of public funds but also public (and customary) land and other public assets (including scholarships etc), from genuine priorities, into overpriced or substandard infrastructure or personal gain. The other public watchdogs (and community watchdogs) must also be adequately informed and resourced, including whistle-blower and freedom of information legislation, and mechanisms to be more transparent, including use of automated systems (as with customs already), and market-based transactions (as with lands), rather than sole discretion of officials, Ministers or even boards. Penalties need to be adequate and applied to undermine the incentive both for so-called white or blue collar crime. Businesses which also choose to undertake such malpractice, to advance their interests to secure licenses, permits, land, contracts and other benefits, or wriggle out of tax or other obligations, must also be exposed and penalised, and to enable a fair and level playing field for investors and business to perform.

PNG’s resource extraction industries themselves must be in the forefront of maintaining the highest social and environmental standards, for their own reputation, as their duty and as good local corporate citizens, The majority of PNG’s population (and other industries) live in rural areas, and
are directly dependent upon their local natural environment. The mining and hydrocarbon industries in PNG are dependent upon good local community relations, including the customary landowners upon whose land and rivers they operate or must travel. Mechanisms for PNG’s sustainable and balanced economic (and social) development are dependent upon:

- fiscal prudence, and priority on essential recurrent maintenance and services expenditure, notably for law and order, basic transport infrastructure and utilities, quality but affordable education and training, including enhanced teacher training, and primary health care, coordinated district services, plus targeted research and standards/regulatory functions,

- strengthening effective planning, coordination, utilisation and oversight of current and prospective revenue and expenditure in addressing priorities, including restoration and upgrade of national and local infrastructure, including to meet population growth, and strengthening public awareness and ownership over public goods and social auditing,

- immediate and sustained public sector management/capacity building including for the districts and LLGs, including for overseeing private contracting and Public-Private Partnerships, and replacing and right-sizing moribund or duplicative public sector bodies with more effective and accountable structures, where applicable, (e.g. provincial health authorities and other agencies with representative, and non crony, stakeholder boards),

- strengthening all mechanisms to ensure greater accountability and stiff penalties for abuse, involving stakeholder partnerships, whistle-blower protection and incentives,

- establish the Sovereign Wealth Fund(s) but with clear objectives, rules, public participation, ownership and oversight, transparently and independently managed and supervised, to sanitise an appropriate and agreed portion of LNG revenue offshore, to mitigate ‘Dutch disease’ impacts and stabilise priority expenditure, and perform other priority investment/maintenance funding functions, including potentially the future/pension/social protection function, as determined, applying ‘best practice’ Santiago principles, and arms length from ongoing political direction; learn the lessons from the 1990 minerals boom (e.g. with the MRSF) and from overseas,

- encourage investment, competition and partnerships in provision of infrastructure and utilities, including renewable energy provision, accessible and affordable ICT for improved, more reliable and affordable services to business and the community, (including rural schools and other community services and accountability),

- develop contacts and partnerships of all scales, linking skills and capital, as with agro-nucleus enterprises, financial services, including new and traditional means for partnership, including cloud-sourcing, innovative venture capital etc.,

- Ensuring priority attention to meeting the needs of the people of PNG, in both urban and rural areas, but also in the workplaces, addressing health, welfare and human resource development needs, but including cooperation in firmly addressing gender, child welfare and support, and other discrimination and family and sexual violence issues.
There is a long way to catch up in providing public and private goods and services and broad-based opportunities, without misallocating funds, driving up living costs and jeopardising food security (especially with monopolies or other deals on staple foods), enriching some businesses through costly and uncompetitive contracting etc. It requires strong support or pressure from the whole community to ensure that reforms and good governance occurs and not side-lined.

PNG has extensive natural resources, but extracting them comes at a cost and the country cannot afford to waste the opportunities provided, with poor investment conditions and deficient expenditure planning and governance, at either the national or sub-national levels, as it has too often in the past. As with Botswana’s experience, one cannot wait until the revenue arrives to put governance systems in place; that’s too late. Strong governance mechanisms and a commitment to their application is a precursor, to ensuring effective utilisation of revenue and other resources for the long term benefit of the whole country, rather than letting funds sitting in trust accounts cause undue temptation, and thereby jeopardise the prospects for future generations and the wider community.

These are challenge for the country’s leadership and wider community, including business, now and the future.

New developments in centres of learning (University of Goroka)
The thriving hub of Mt Hagen city

PNG’s infrastructure challenges; the New Britain Highway, WNBP
PNG transport infrastructure challenges, near Bialla on the New Britain Highway, 2014