



MONGOLIA:

IMPROVING PUBLIC INVESTMENTS TO MEET THE CHALLENGE OF SCALING UP INFRASTRUCTURE

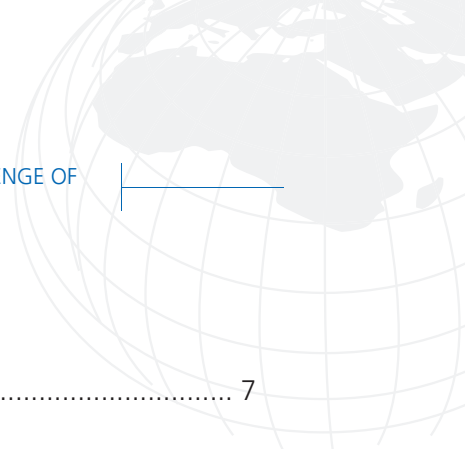
Poverty Reduction and Economic Management Sector Unit
East Asia and Pacific Region



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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
CPA	Central Procurement Agency
CSO	Civil Society Organizations
DBM	Development Bank of Mongolia
ETT	Erdenes Tavan Tolgoi LLC
FSL	Fiscal Stability Law
GDP	Gross Domestic Product
IAAC	Independent Authority Against Corruption
IBL	Budget Law of Mongolia
IMF	International Monetary Fund
MCC	Millennium Challenge Corporation
MED	Ministry of Economic Development
MDG	Millennium Development Goals
MNAO	Mongolia National Audit Office
MNT	Mongolian Tugreg
MoF	Ministry of Finance
MTBF	Medium Term Budget Framework
MTFF	Medium Term Fiscal Framework
NDIC	National Development and Innovation Committee
OECD	Organization for Economic Cooperation and Development
OT	Oyu Tolgoi Copper Mine
PIP	Public Investment Program
PPLM	Public Procurement Law of Mongolia
PPP	Public Private Partnerships
PSMFL	Public Sector Management and Finance Law
SEG	Social and Economic Guidelines
SPC	State Property Committee
TT	Tavan Tolgoi Coal Mine
WB	World Bank
WDR	World Development Report



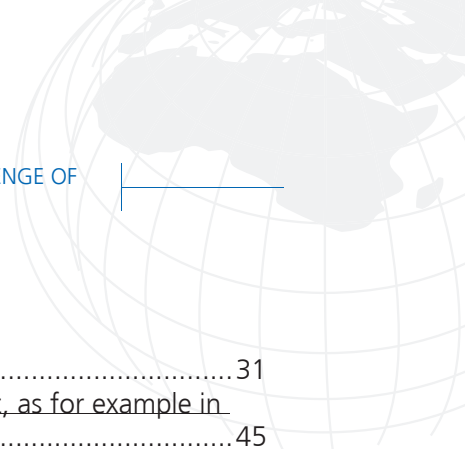
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EXECUTIVE SUMMARY

1. Mongolia today is at the cusp of a major economic transformation as it begins to exploit its vast copper, gold, coal, and other mineral resources. The economy has been growing at almost 9 percent on average in real terms since 2003 when the mining boom began with the increase in global commodity prices; growth has accelerated to double-digits in 2011 and 2012 with the construction of the Oyu Tolgoi copper mine, one of the five largest in the world; and will likely remain in the double digits as Oyu Tolgoi and the similarly huge Tavan Tolgoi coal mine, with an estimated 100 years of coal reserves, go into operation over the next few years thereby greatly increasing the volume of Mongolia's mineral production and exports. If the right institutions and policies are put in place, this resource boom can be used for the sustained improvement in the lives of current and future generations of Mongolians.

2. Achieving this potential is far from automatic as there are numerous examples of commodity rich countries which have performed worse than those without such endowments, hence the frequent use of the phrase "resource curse". Natural resource production is an "enclave" activity with few linkages to other sectors of the economy, which means that mining-driven high GDP growth numbers by themselves do not automatically imply broader development of the other sectors of the economy or large-scale job creation. And, most importantly, mineral resource revenues significantly increase opportunities for corruption, a risk that is particularly acute in Mongolia given the scale and pace of the change, its very heavy dependence on natural resources, and the already close connections between political and construction industry circles.

3. One of the main mechanism for avoiding these problems and achieving sustained growth through a diversified economy will be public investments in infrastructure, education, and health to provide public goods, address market failures, crowd in private investments, and

achieve redistributive goals. Infrastructure needs are considerable for a vast, scarcely populated, and sub-arctic climate country such as Mongolia with poor transport connectivity and high unit costs of service delivery. Financing will be less of a constraint as government revenues are projected to triple in the next seven years as the mines go into full production, and increase steadily thereafter. The key challenge will be to effectively use these increasing revenues, with the major responsibility falling on the Government's public investment system for planning and implementing capital projects.

4. The objective of this report is to analyze in depth the current public investment management system and to assess whether or not it is able to meet this challenge of delivering good quality projects in the priority areas in a macro-economically sustainable manner; and to recommend what needs to be done to improve the system so that it is able to effectively transform natural resource revenues into sustainable capital assets.

5. Meeting this challenge will require adherence to four broad principles. First, spending should aim to achieve "allocative efficiency" by shifting resources from less productive sectors to more productive ones ("spending in the right areas"). Despite the huge increases in revenues, the needs will continue to outweigh the available resources, at least in the near future, and therefore some hard decisions about infrastructure prioritization will have to be made. Second, public expenditures should be grounded in a sound macro-fiscal framework to avoid the deleterious effects of commodity price volatility and to prevent real exchange rate appreciation from an investment spending boom not modulated to the absorptive capacity of the economy. Third, the public investment management system should be sound so that that capital projects are well prepared, implemented in a transparent and cost effective manner and well maintained ("technical efficiency"). Finally, the construction sector has to be able to effectively respond and

meet these increasing demands placed on it by the government, and the investment climate should be such as to encourage the growth of the sector, thereby increasing the absorptive capacity of the economy.

6. As of today, the Government is not meeting any of these four principles and correcting these weaknesses is of paramount importance given the Government's ambitious plans for scaling up infrastructure. Budget funded capital expenditures have increased twenty-fold since 2005, and the Government recently successfully issued a \$1.5 sovereign bond — equivalent to 15 percent of GDP — to finance road, rail, and energy infrastructure. Without concerted action there is a real risk that the citizens of Mongolia will not rightfully benefit from the mining boom.

7. Before elaborating on these problems, it should be noted that the Government recognizes this challenge and has recently undertaken some major reforms in the regulatory framework for public expenditure management. These initiatives include a new Fiscal Stability Law (FSL, 2010) to improve macroeconomic stability; a new integrated Budget Law (IBL, 2011) to strengthen budget formulation and execution; and an amended Public Procurement Law (PPLM, 2011) to significantly change the institutional arrangements for public procurement with the aim of increasing capacity and transparency. These laws however, are yet to be effectively implemented and face significant opposition from vested interests. One major difficulty is that other laws, such as the Law on the Development Bank of Mongolia (2011) and the Concessions Law (2009), are undermining these legislative reforms. Corruption is a major concern, particularly because of the close overlays between political, mining, and construction industry circles. There is also a significant lack of coordination between the key agencies involved, and the Government will need to significantly improve its human resource capacity while working around the relatively fixed constraint of labor scarcity.

KEY PROBLEMS THAT NEED TO BE ADDRESSED

8. *Not spending in the right areas:* Mongolian policy-makers are not making the best use of their budgetary resources and are under-spending in high priority areas and over-spending on lower priority ones. The main indicators of this allocative inefficiency is the relative neglect of the "growth poles", or geographic areas that are the natural clusters of economic activity in Mongolia and which produce the bulk of the economic growth; and the gross under-spending on infrastructure maintenance with the result that capital assets have been deteriorating quickly and require costly rehabilitation or replacement.

9. Mongolia's growth poles are the capital city of Ulaanbaatar, and the mining regions of the south Gobi and the north. These have all seen a significant increase in population over the past decade through migration from the rest of the country, a trend that will almost certainly continue. Ulaanbaatar now accounts for 45 percent of Mongolia's population, and is continuing to grow rapidly. However, infrastructure spending does not reflect this economic geography. While infrastructure in south Gobi is largely being developed by the mining companies themselves, Ulaanbaatar is heavily reliant on central government spending and currently receives only 30 percent of the roads sector, and 20 percent of energy sector, central government capital budget allocations. The result is severe congestion on Ulaanbaatar's roads — average traffic speeds have halved over the past decade in the city center — and dangerous levels of pollution as the residents of the peri-urban *ger* areas have to burn coal during the severe winter months as they are unconnected to the city's central heating network. This poor prioritization is also evident in the Government's medium-term development plans — Ulaanbaatar will only get 21 percent of the planned road construction for 2011-2016.

10. 60 percent of the national paved road network is in poor condition and in need

of urgent capital repair and rehabilitation. However, the Government spends only 20 percent of what is required annually on routine maintenance in the roads sector. The growth in new investments is also significantly outpacing that in capital repairs — expenditure on new investments increased twenty-five fold since 2005 as compared to a thirteen-fold increase for capital repairs — pointing to increasing problems in maintaining capital assets in the future. Correcting this problem would only require a modest reallocation of 20 percent from new investments to maintenance, which can be easily achieved today if the political will is there.

11. Public investments not grounded in a sound macro-economic strategy: The two particular macro-economic challenges that mineral-rich countries need to effectively deal with are the volatility of mineral prices and real-exchange rate appreciation (the “Dutch Disease”) due to over-spending. If investments increase at a pace much higher than the absorptive capacity of the economy then this will result in inflation and an appreciation of the real exchange rate with its consequent negative macroeconomic effects. In Mongolia, this effect is clearly visible today with the soaring prices of construction materials as the construction sector is unable to expand capacity adequately to meet the rapidly increasing government demand. An optimal strategy would therefore, be to spread the investments over time by limiting the growth in annual investment spending to avoid such over-heating of the economy.

12. The FSL, which went into effect on January 1, 2013, recognizes this problem and puts in place fiscal rules to smooth volatility by using long-term prices to estimate mineral revenues and requires budgets to comply to a structural deficit of less than 2 percent of GDP; to control expenditure growth to less than nominal GDP growth and therefore avoid over-heating of the economy; and to ensure long-term fiscal solvency through caps on public debt.

13. The FSL however, is not being implemented in principle through off-budget financing of infrastructure that bypasses these fiscal rules, in particular the structural balance and the expenditure growth rule. Specifically, this off-budget financing is in the shape of “build-transfer” (BT) projects in the roads and energy sectors that were financed by construction companies themselves on the condition of repayment from the budget at a later date; and excessive lending by the Development Bank of Mongolia (DBM), in particular for non-revenue generating public infrastructure projects. The value of off-budget BT and DBM-financed schemes, in terms of total project cost, has increased from 3 percent of the total capital budget in 2008 to over 41 percent in 2012, which represents a significant fiscal liability for the Government. It is anticipated that DBM project finance for non-revenue generating projects is equivalent to 4 percent of GDP for 2012, and will likely be higher for 2013, thereby violating the FSL structural balance rule.

14. The DBM is likely to be a major source of infrastructure financing in Mongolia going forward and, under a sound macroeconomic and corporate governance framework, can play an important role in the country’s development. However, the DBM’s current legal framework has a number of weaknesses which means that there is a risk that it is funding the wrong projects, and is doing so under excessive political influence. These weaknesses include: insufficient clarity of its mandate, in particular no explicit reference to cost-recovery implying that the DBM can, and is, funding projects that should be funded from the government budget; excessive authority of the parliament to instruct the DBM to finance specific projects, which compromises its independence; lack of clarity on who the government shareholder is; lack of sufficient independence of the DBM board; lack of a clear supervision function; and excessive authority to lend funds (50 times equity) which can create substantial future fiscal liabilities for the Government. Unless urgently addressed, these problems imply that Mongolia risks repeating the failures of many development banks in

Africa, Latin America, and Asia that were used to finance bad, politically motivated projects and became loss-making enterprises requiring frequent bailouts from the government.

15. *Poorly prepared projects:* A major problem in Mongolia is that most projects that enter the budget are poorly prepared. They have inaccurate cost estimations that require frequent additional financing in supplementary budgets, there is little justification of the projects based on national and sectoral priorities, and the future maintenance needs of the projects are not calculated. The precise roles and responsibilities of the Ministry of Economic Development (MED) and the Ministry of Finance (MoF) remain unclear in practice, even though these are reasonably well laid out *de jure* in the IBL. And members of parliament insert a number of projects during the budget debate session that bypass the normal planning and budgeting process and have even more inaccurate cost estimations.

16. The IBL attempts to address some of these weaknesses. It mandates that only projects that have gone through a proper appraisal process will be considered for financing, with the MED responsible for reviewing and evaluating the appraisal (pre-feasibility and feasibility studies) of large, strategically important projects. Effective implementation of the IBL however, will pose a challenge given capacity constraints as well as poor coordination between the line ministries, the MED, and the MoF. In particular, the new government structure of 2012 indicates that responsibility for evaluating all projects has been transferred to the MED. Such separate institutional processes for the capital and recurrent budgets, with the MED responsible for the former and the MoF the latter (a dual budget), will likely fragment policy-making. MED will also not have sufficient capacity to properly evaluate the over a thousand project proposals that it will receive each year from line ministries, with the result that project preparation will continue to be poor.

17. *Lack of transparency and capacity in public procurement:* Public procurement is usually the

most vulnerable part of the public investment system as procurement requires government officials to exercise discretion and make decisions over large sums of money at specific points in time which often invites influence from “interested” parties. These problems are particularly evident in Mongolia given the small size of the formal sector and the close connections between ministers and members of parliament and the construction industry. Approximately 10 percent of parliamentarians in the 2008-2012 parliament owned shares in construction companies, and the top ten local construction companies, which combined received 30 percent of road construction contracts in the past five years, were either owned by members of parliament or by individuals who had close ties to them. Mongolia also has the more common technical problems of poor procurement planning and limited human resources in public procurement, which combined with the political interference results in a low value for money of infrastructure projects as measured by time and cost overruns.

18. Line ministries, which to date have been responsible for a bulk of the public procurement, have few specialized procurement staff to handle the seven-fold increase in procurement since 2006. This lack of capacity combined with the short duration of the construction season in Mongolia — from April to October — implies that any delay in tendering in the relatively short window of time between the December approval of the budget and the start of the construction season could delay a project by at least six months to the next construction season. Poor cost estimation has been a major problem in procurement planning, in part due to the use of outdated cost norms, and in part by the tendency to award contracts to the lowest priced bidder which has encouraged companies to submit unrealistically low bids and to then seek price increases during contract implementation.

19. The extensive use of direct contracting — 43 percent of all contracts, and 75 percent of

roads contracts in 2007 — is the most obvious indicator of political interference in the award of contracts. Such large-scale direct contracting is now prohibited by the amendments to the PPLM approved by parliament in 2011. However, the DBM is not subject to the PPLM and has been, on the instructions of the parliament, implementing a number of roads projects through direct contracting.

20. The amended PPLM has substantially altered the procurement system in the country. Two important changes are the creation of a new central procurement agency (CPA) that will be responsible for all major procurements from the central government budget, taking procurement authority away from the line ministries (line ministries will continue to be responsible for contract implementation); and a new formal role for civil society organizations (CSOs) in bid evaluation and contract monitoring.

21. The rationale for the creation of the CPA is to both increase procurement capacity and to increase transparency and reduce the risks of corruption. The aim is to establish an entity that specializes in procurement and which would be staffed by professionals dedicated full time to this purpose, as opposed to the current arrangements where regular officials from line ministries conduct procurement in addition to their normal duties. This separation of the procurement function from line ministries is also meant to allow the latter to focus on their main responsibilities of policy-making, planning, implementation and monitoring.

22. A priori, it is difficult to predict whether the centralization of procurement increases or reduces the risks of corruption and political interference. On the one hand, under the wrong leadership, the CPA will have much greater ability than multiple line ministries to compromise the procurement process given the scale of the procurement that will be conducted by it. On the other, the centralization and separation of procurement from the contract implementation function may also reduce the risk of political capture as compared to retaining

both responsibilities in line ministries given the close links between political and business circles. The reasons are both the lower cost of monitoring the procurement process in one agency as opposed to several ministries; and the increased cost to those who would wish to influence contract award for their own personal and political interest since they would now need to effect the CPA as well as concerned line ministry staff since both will be involved in the bid evaluation committees. Retaining procurement authority with line ministries and increasing specialized procurement staff in them would not address this political economy problem since these staff would continue to be susceptible to the influence of their minister.

23. The authority given to CSOs in the PPLM is very extensive when compared to similar pieces of legislation in other countries, and if effectively implemented will make Mongolia quite unique in institutionalizing citizen oversight over public procurement. This change is in keeping with a trend seen in many countries over the past several years for a greater push for transparency and CSO oversight of public expenditures. Concerned CSOs in Mongolia have recently come together to form a procurement monitoring network called the Public Procurement Partnership.

24. Inflexibilities in budget execution: Between 50 to 60 percent of the capital budget is disbursed in the fourth quarter of the financial year, with approximately 30 percent in the final month. Part of the reason for this skewed pattern is the incentive for line ministries to disburse given that the capital budget is annually appropriated and any unspent funds are re-appropriated by the MoF at the end of the fiscal year. This pressure to disburse undermines financial controls as money is being given to construction companies for work that is yet to be completed. The capital budget has to date not provide any flexibility to deal with project cost adjustments or to allow for virements between projects without the approval of parliament. An additional inefficiency is the excessive involvement of the budget department of the MoF in authorizing payments for projects, a responsibility that

ideally should be delegated to line ministries in keeping with their authority for project management. The IBL has introduced reforms to address some of these problems, although some, such as allowing carry-over financing for 3 months, do not go far enough.

25. Capacity limitations in the construction sector: Improving government systems for planning, budgeting, procurement, contract implementation, and monitoring have to be matched with ensuring that there are no regulatory hurdles that prevent the growth of the construction industry to meet the rapidly growing demand, and addressing capacity constraints. The Mongolian roads construction industry is currently incapable of meeting the huge construction demands of the medium term plan. These capacity constraints are evident in the soaring prices of construction materials. While the industry has been growing steadily, of the 186 registered road construction companies, only 59 are currently active, and of these 59 only 10 have the capacity to build roads above 50 km in length. Restrictions on the hiring of foreign workers are the main regulatory constraint to the construction sector. Due to the labor force shortage —approximately 500 engineers and 5,000 skilled laborers are employed in the roads construction sector, about half of what is currently needed—it is essential for companies to obtain laborers and specialists from abroad. However, the Labor Law requires a specific quota to be kept between the number of local and foreign workers. The law also requires a high premium (monthly fees) per foreign worker which approximately equals the average salary of a local construction worker. There are also some restrictions in the Customs Law on the import of equipment that negatively impact the sector. Non-competitive procurement practices — both *de jure*, such as the use of direct contracting and the recent raising of the threshold for international competitive bidding, and *de facto* through politically motivated award of contracts — also hurts the growth of the construction industry by creating barriers to entry.

26. The result: low value for money: These weaknesses in the public investment system,

together with the limited capacity of the construction sector, all translate into low value for money of public investments. Time and cost overruns are ubiquitous; a sample of roads projects had an average time overrun of 120 percent and an average cost overrun of 35 percent.

POLICY RECOMMENDATIONS

27. Political economy factors underlie many of these technical problems in the public expenditure system. For example, the need for members of parliament to appeal to rural constituencies plays a big role in the skewed infrastructure spending towards the growth peripheries; and the links between political and business circles explains many of the problems in public procurement as well as the extensive use of off-budget financing. The rapid socio-economic transformation underway however, is also changing the political landscape and part of the Government's motivation for the host of public expenditure reforms underway — the FSL, the IBL, and the PPLM — as well as a new Conflict of Interest Law and a Freedom of Information Law, is to put in place regulatory safeguards that will prevent these new resource rents from being “captured” by relatively few privileged elites who could then become politically dominant thereby reducing the political influence of the majority of members of parliament. There are also several positive features of Mongolia's political economy — an ethnically homogenous and relatively well educated populace, and relatively (compared to other developing countries) well-disciplined political parties with a clear corporate identity — that give a degree of optimism that some of the reforms being proposed below have a reasonable chance of being implemented.

28. In making its recommendations, this report focuses on some of the details that need to be laid out in implementing regulations in order to make the FSL, IBL, and PPLM work. The report also suggests amendments to some of the existing laws that pose a risk to meeting the four objectives. In proposing policy options,

the report is conscious of the political economy of reform and, wherever possible, analyzes the compatibility of the technical solutions with the political interests of policy-makers.

29. Higher spending on the growth poles and on capital maintenance: the Government's current and medium-term infrastructure spending priorities need to be reoriented to emphasize the growth poles, in particular Ulaanbaatar, and to focus on the maintenance of capital assets to move away from the current 'build-neglect-rebuild' syndrome. 60 percent of Ulaanbaatar's population lives in peri-urban settlements that are not fully integrated into the city's infrastructure, a problem that will get worse if not urgently addressed with the continuing migration into the city. Rather than discouraging migration to Ulaanbaatar and artificially creating alternative urban centers, as outlined in the draft medium term National Development Strategy, the Government needs to accept that this migration is driven by the forces of economic agglomeration that, if well managed, can encourage broader-based economic growth.

30. Improving the lives of the residents of the ger areas will require construction of access roads; better heating systems to improve efficiency and reduce air pollution; investments in solid waste management and community infrastructure; affordable collective housing for mid-tier areas; and expansion of the city's electricity, heating, and water utilities. In the roads sector, new construction should concentrate on where demand is the highest: Ulaanbaatar's city trunk and feeder roads the international transit corridors, and roads serving mining areas.

31. This is not say that equity considerations are not important. In fact low cost improvements in rural transport connectivity are feasible given that Mongolia's terrain allows for relatively good driving conditions on natural tracks and gravel roads. These natural tracks can be made all-weather through a focused program of spot improvements that would entail the construction of some new bridges or culverts

on the main national and local unpaved roads to make these roads all-season, and regular maintenance, thereby improving connectivity for rural communities.

32. The government needs to increase its annual roads maintenance spending from the current 15 billion MNT to 75 to 90 billion MNT to meet network maintenance needs and to clear the backlog. This can be achieved through a modest reallocation from new investments to maintenance as it represents only 20 to 30 percent of the 330 billion MNT earmarked in the 2012 capital budget for new road and bridge construction. Clearly this is a "low hanging fruit" that can show immediate results if the political will is there to implement it.

33. Ensuring that the DBM is within the framework of the FSL: Sensible phasing of capital expenditures implies complying with the fiscal rules set out in the FSL for budget funded expenditures and placing adequate safeguards on alternative forms of financing, most notably from the DBM. It is imperative that there be a clear policy from the government that: (a) that the DBM only funds revenue-generating projects; (b) if it is to fund social benefit projects then the amount of lending to such projects (e.g. the \$150 million lent for rural roads in 2012) be reflected in the state budget and therefore be capped by the structural balance and expenditures rules of the FSL; and (c) that there are some limits on the aggregate lending of the DBM to prevent overheating of the economy and to ensure macroeconomic sustainability. These provisions would require an amendment to the DBM Law.

34. Eliminating BT schemes: BT schemes involve very little transfer of risk from the government to the private sector partner and increase the financing costs of projects. The advice on this is simple: the government should discontinue these BT schemes as they are a bad practice and should instead finance such projects from the budget.

35. Strengthening the legal framework for public-private partnerships: More generally, the

legal framework for public-private partnerships in Mongolia, which is set out in the Law on Concessions (2010), is quite weak. Under the IBL, the MoF has now been correctly given the sole authority on evaluating fiscal risks of PPPs and issuing guarantees, addressing a major weakness in the Concessions Law. However, this provision could be strengthened further given the particular risks that Mongolia faces. Some countries have established in law a quantitative limit on the government's aggregate exposure to fiscal risks through PPP contracts. This would limit the government's exposure to fiscal risk during the period when the PPP policy is being developed and piloted, and the government is building its capacity to assess risk, and design and implement contracts.

36. Improving corporate governance in the DBM: The vast majority of development banks across the world are either 100 percent or majority government-owned and therefore government ownership in itself is not a determinant of success or failure. Rather, the better performing development banks have been characterized by a sound regulatory environment and corporate governance principles, which include a clear mandate, clear ownership structure, independence of the board, checks against political interference, strong supervision, and regular performance assessment. It is critical that these principles be incorporated in the regulatory framework of the DBM, and the report provides some suggestions to this effect.

37. Strengthening project preparation: The IBL represents a significant step in strengthening the regulatory framework for project preparation and appraisal, and in improving the coordination between planning and capital budgeting. However, operationalization of the IBL is very much a work in progress. There is a risk that responsibilities for capital and recurrent budgets will be split between the MED and the MoF; that the methodology for the more rigorous project appraisal required in the IBL will not be sufficiently calibrated to current capacity in the MED and MoF; and that parliament will continue to insert projects that bypass the IBL.

38. This report recommends that the division of responsibilities between the MED and the MoF proposed in the IBL be implemented, with perhaps the threshold of large projects to be evaluated by the MED lowered from 30 billion MNT to 10 billion MNT. The exact amount of the threshold is a judgment call, and should be such so as to ensure that only large, complex projects of a number that can be realistically evaluated by the MED given its current staff capacity are above it. On project appraisal methodology, the report suggests that initially the Government for most projects focus more on ensuring accurate cost estimates rather than a full socio-economic cost-benefit analysis, with cost-benefit analysis limited to large, complex projects. Parliament proposed projects should be subjected to the same project appraisal process specified for line ministry projects in the IBL and supporting regulations. In terms of the budget cycle, this may imply that projects proposed during the parliamentary budget session, if they pass MED's or MoF's appraisal, could be considered for funding and inclusion in the capital budget for the following fiscal year. Alternatively, for projects to be included in the same fiscal year there needs to be a formal mechanism by which parliament can propose projects early during the budget preparation process.

39. Improving public procurement and project implementation: The three key challenges that the CPA will face are how to ensure that the centralization of procurement reduces corruption and increases transparency; how to properly coordinate with the line ministries that are still responsible for preparing the technical specifications and to clarify that they remain accountable for contract implementation; and how to scale up capacity quickly.

40. On the first challenge, the extensive use of e-procurement will be important, though this would not entirely solve the problem of political influence in bid evaluation. The Procurement Inspectorate under the MoF will also clearly have an important role to play in supervising the procurement process. The Government is also considering the establishment of an Oversight

Council under the Prime Minister. These are all important measures. However, given Mongolia's small size and the fact that conflict interests abound, it would also be advisable to subject some of the CPA's operations to international oversight. For high profile, and/or particularly sensitive contracting, the CPA should consider the use of "probity advisors", typically an international audit firm, on bid evaluation committees in order to provide independent procurement expertise in the event of disagreement and to ensure a transparent and robust process.

41. Success of the CPA will be conditional on proper coordination with line ministries that will continue to provide all the technical specifications for the bidding, and will continue to be responsible for contract implementation, and clarity on roles and responsibilities so that all stakeholders know what they are accountable for. The PPLM's implementing regulations need to clearly state that the CPA takes responsibility for facilitating the administrative processes, i.e. advertising, disseminating tender documents, receiving and opening bids, organizing evaluation committees etc. At the same time, it should be clearly stated in the regulations that the line ministry/implementing agency takes responsibility for the technical aspects of the procurement, i.e. (a) preparation of technical specifications and related requirements in the tender documents and (b) the technical evaluation. Without this ownership from the implementing agencies accountabilities will be diluted and line ministries may even have an incentive for the CPA to fail.

42. The CPA will also need to quickly ramp up capacity. Currently there is no transition arrangement in place — as per the PPLM, the CPA will have to take over from line ministries starting January 1, 2013 — which creates a big risk that sufficient capacity will not be in place in time to have contracts finalized before next year's construction season commences. It would be advisable for the CPA to begin slowly with some selective contracts to give it sufficient time; this provision however, would require an amendment to the PPLM.

43. The report provides some detailed suggestions to both the Government and the emerging CSO procurement network that has recently formed on the modalities for CSO participation in bid evaluation and contract monitoring, on the nature of the self-regulatory regime for the Public Procurement Partnership, and on long term funding arrangements so that CSOs are not reliant on unpredictable international donor resources. In order to preserve their independence, it is suggested that CSO participants in bid evaluations should be observers, and not voting members, with their observations documented in standardized observers' report that can be publically available. The criteria that are used to select contracts for CSO monitoring should be transparent, with the annual monitoring authorized by the Cabinet in order to guarantee CSO access to all relevant documents. With regards to the CSO network, to encourage its growth it is recommended that the network enact loose entry requirements such as prior experience with monitoring government processes, compulsory training for affiliates, and agreement to a code of ethics, the violation of which would result in black-listing. Finally, on sustainable funding in the medium to long run, an independent national foundation can be established to fund different types of CSO activities including procurement monitoring. The foundation would need a predictable and sustainable source of funding — from the budget, development partners, mining companies — and an independent board or council for making funding decisions for individual CSOs in various streams of activities.

44. *Improving budget execution:* Mongolia's capital budget execution faces two particular challenges: an extreme climate that reduces the construction season to 6 months; and high volatility in the prices of construction materials that makes it difficult to fully anticipate costs during budget preparation. Greater flexibility in budget execution is required to meet these two challenges. The two usual methods are carry-over funding or multi-year appropriations, and giving spending agencies more authority for virements between projects. On the latter, the

IBL has made significant progress. On the former, the IBL only allows carry-over for three months of up to 3 percent of the capital appropriation, which implies that any spending in the next fiscal year would have to be completed before the new construction season commences in April. Therefore, this provision does not do enough to solve the problem. Instead, the carry-over provision should be increased to one year, while sticking to the 3 percent limit, to provide sufficient time for the completion of works while minimizing fiscal risks.

45. Addressing human resource capacity constraints: Limited number of skilled personnel is a persistent theme in many of the problems identified in this report. Key ministries and agencies in Mongolia are generally small and the potential for significantly recruiting staff with the necessary technical expertise for planning, budgeting, procurement, and project implementation in the near term is limited. Worryingly, the booming wages in the mining sector are attracting some of the best staff in the civil service, a part of the general movement of factors of production from the non-mining to the mining sector that is a common characteristic of natural resource-rich economies.

46. In order to combat this “brain drain” from the civil service, and to maintain its attraction for new recruits, the Government may need to be more flexible in its approach to civil service pay by moving beyond across-the-board salary increases and giving additional market-based

salary premiums to staff working in jobs in high demand. The Government will also need to rely more on contracting-in and contracting-out the necessary capacity, such as for project appraisal and procurement of large, complex contracts.

47. The problem of skills scarcity is obviously not limited to the government, as the discussion of the construction sector highlighted, and over the medium to long term additional investments in the education system, including tertiary and vocational training to ensure that the economy can draw on a highly qualified pool of technicians, operators, engineers, and other professionals will be necessary. Realistically however, these measures will not completely ameliorate the fundamental constraint of labor scarcity in Mongolia, and the Government will need to learn from the experience of other labor scarce natural resource rich countries which relied extensively on importing both skilled and unskilled labor from overseas. Currently, international migration flows to Mongolia are low with migrants accounting for only 0.4 percent of the country’s population. As noted, the policy for migrant workers is restrictive, which in particular is hurting the growth of the construction sector. Opening the borders to highly qualified immigrants can plug the skills shortfall and produce knowledge spillovers that accelerate human capital formation.

48. These policy recommendations, with a suggested prioritization for implementation are summarized in the table below:

	Policy Recommendations	Priority
	Spending in the Right Areas	
1.	Greater proportion of budget infrastructure capital spending should be directed towards Ulaanbaatar and the growth poles. In the roads sector, priority should be given to Ulaanbaatar’s trunk and <i>ger</i> area roads, the international trade corridors, and the roads in the mining regions.	Immediate
2.	In the rural areas, the government should focus on low-cost spot improvements (e.g., construction of bridges or culverts, maintenance of natural tracks) on the main national and local unpaved roads to make these roads all-season, thereby improving connectivity for rural communities.	Immediate

3.	The Government should be annually spending five times as much as it currently does on road maintenance to cover routine maintenance needs and to clear the backlog of roads requiring rehabilitation. This would only require a 20 percent reallocation from new investments to maintenance and repair and can be easily achieved.	Immediate
Achieving the Balance between Infrastructure needs and Macro-fiscal Sustainability		
4.	The Government should have a clear policy that (a) that the DBM only funds revenue-generating projects; (b) if it is to fund socially beneficial projects then the amount of lending to such projects be reflected in the state budget and therefore be capped by the structural balance and expenditures rules of the FSL; and (c) that there are some limits on the aggregate lending of the DBM, through adequate capital adequacy ratios and MoF oversight, to prevent overheating of the economy and to ensure macroeconomic sustainability. Such a policy will require amendments to the Law of the Development Bank.	Immediate
5.	The government should discontinue “build-transfer” (BT) schemes in the roads and energy sectors as they increase the cost of projects and involve very little transfer of risk from the government to the private sector, and should instead finance such projects from the budget.	Immediate
6.	The government should consider imposing a cap on its aggregate exposure to fiscal risks through PPPs, perhaps initially at 2 percent of government revenues, a figure which could be increased as experience of implementing PPPs grows.	Medium-term
Strong Corporate Governance for the DBM		
7.	The Law on the Development Bank needs to be strengthened to reduce the risk of macroeconomic instability and poor quality of capital expenditures. This will require amendments to ensure clarity of mandate; a higher capital adequacy ratio; greater oversight by the MoF; independence for the board; supervision by the Bank of Mongolia; and performance contracts to balance accountability with independence.	Immediate
Strengthening Project Preparation		
8.	The Government should not create a dual budget with the MED and MoF responsible for preparing the capital and recurrent budgets respectively. Instead, the IBL provisions on planning and capital budgeting should be implemented with the MED responsible for reviewing large projects only. The Government however, could consider lowering the threshold for these large projects from 30 billion MNT.	Immediate
9.	The draft planning law needs to specify the consultative mechanisms, such as sectoral inter-ministerial groups, and a Southern Gobi Infrastructure Council, to mandate the collaborative process needed in developing the medium and long term planning documents and scenarios.	Medium-term
10.	The implementation of IBL provisions on project appraisal need to be calibrated to local capacity. The Government could start by focusing more on the cost side of cost-benefit analysis for most projects, with the more sophisticated full socio-economic cost-benefit analysis limited to large, complex projects.	Immediate
11.	Parliament proposed projects should be subjected to the same project appraisal process specified for line ministry projects in the IBL and supporting regulations. In terms of the budget cycle, this may imply that projects proposed during the parliamentary budget session, if they pass MED’s or MoF’s appraisal, could be considered for funding and inclusion in the capital budget for the following fiscal year. Alternatively, for projects to be included in the same fiscal year there needs to be a formal mechanism by which parliament can propose projects early during the budget preparation process.	Medium-term

Improving Budget Execution		
12.	The IBL should be amended to increase the carry-over funding provision for capital projects from three months to one year, while sticking to the 3 percent limit, to provide sufficient time for the completion of works while minimizing fiscal risks.	Medium-term
13.	The budget department of the MoF should not be authorizing payments for capital projects as this is a treasury function and it takes precious time away from the vital task of budget planning and project appraisal.	Medium-term
Greater Capacity, Transparency, and Oversight in Procurement and Project Implementation		
14.	In order to ensure transparency and adequate oversight over the Central Procurement Agency the Government should: establish an Oversight Council; use e-procurement; and for high profile contracts, use “probity advisors”, typically an international audit firm, on bid evaluation committees to both advise on technical issues and to be an independent observer to ensure transparency and robustness of the process.	Immediate
15.	In order to clarify roles and responsibilities between the CPA and line ministries, the line Ministry/ Implementing Agency should have the majority vote in respect of the technical issues during bid evaluation (either when it comes to voting on technical issues or by way of a separate technical evaluation sub-committee, whatever is most efficient). To provide a guarantee of probity, the CPA would be able to veto that technical decision whenever it considers the decision not to be genuine.	Immediate
16.	Transition arrangements need to be in place as the CPA builds capacity to ensure that procurements are not delayed. It would be advisable for the CPA to begin slowly with some selective contracts to give it sufficient time; this provision however, would require an amendment to the PPLM.	Immediate
17.	It is recommended that the non-government participants on bid evaluation committees should be observers and not voting members, and should not comment on the technical evaluations but restrict their role to observing and commenting on the transparency of the process and compliance to rules and regulations.	Immediate
18.	There should be a standardized reporting template — an “observers report” — for bid observers. The template should include a space to include detailed comments. The reports should be submitted electronically and channeled to procuring entities and to the Ministry of Finance.	Immediate
19.	To be effective in contract monitoring, CSOs will likely need to partner with engineers or other technical specialists. The engineers would bring the necessary technical skills to the table, while the CSOs would help ensure that these engineers remain independent and that their technical assessments are effectively used for advocacy purposes to ensure transparency and accountability.	Medium-term
20.	A CSO network has an important role to play to ensure standards in CSO monitoring. This is particularly important given that CSOs can suffer from the same conflicts of interest as policy-makers. The network should be an umbrella organization with affiliates across Mongolia. In the short-term, the network should have very loose entry requirements: prior experience with monitoring government processes (e.g. EITI, budgets, and elections); compulsory training for affiliates; and, agreement to its Code of Ethics. The network should monitor its members’ participation in procurement monitoring and have the right to blacklist members for violating the network’s Code of Ethics or government regulations and laws.	Medium-term

21.	In the short run the World Bank and other donors can fund the CSO procurement network. The Government could also provide a budget line to the MoF to fund contract monitoring and bid evaluations. In the long run, an independent foundation can be established to fund different types of CSO activities, including procurement monitoring, which could be funded by the government, donors, and mining companies.	Immediate & Medium-term
Addressing Capacity Constraints		
22.	In order to combat the “brain drain” from the civil service, and to maintain its attraction for new recruits, the Government may need to be more flexible in its approach to civil service pay by moving beyond across-the-board salary increases and giving additional market-based salary premiums to staff working in jobs in high demand.	Medium-term
23.	The Government can also learn from the experience of other labor scarce natural resource rich countries which relied extensively on importing both skilled and unskilled labor from overseas. Opening the borders to immigrants can plug the skills shortfall and produce knowledge spillovers that accelerate human capital formation. This would require relaxing some of the restrictions on migrant workers in the Labor Law.	Medium-term

CHAPTER 1: THE CHALLENGE OF SCALING UP INFRASTRUCTURE

INTRODUCTION: WHAT THIS REPORT IS ABOUT

1. Mongolia today is at the cusp of a major economic transformation as it begins to exploit its vast copper, gold, coal, and other mineral resources. The economy has been growing at almost 9 percent on average in real terms since 2003 when the mining boom began with the increase in global commodity prices; growth has accelerated to double-digits in 2011 and 2012 with the construction of the Oyu Tolgoi copper mine, one of the five largest in the world; and will likely remain in the double digits as Oyu Tolgoi and the similarly huge Tavan Tolgoi coal mine go into operation over the next few years thereby greatly increasing the volume of Mongolia's mineral production and exports. The scale and pace of this change will be staggering given the roughly trillion dollar estimated reserves in these fifty to hundred year mines, making Mongolia one of the, if not *the*, fastest growing economies of the world. If the right institutions and policies are put in place, this resource boom can be used for the sustained improvement in the lives of current and future generations of Mongolians.

2. Achieving this potential is far from automatic as there are numerous examples of natural resource rich countries which have performed worse than those without such endowments, hence the frequent use of the phrase "resource curse". Natural resources are different from other assets because they need to be extracted and not produced, and they are non-renewable. The former implies that natural resource production is an "enclave" activity with few linkages to other sectors of the economy, and therefore mining-driven high GDP growth numbers by themselves do not automatically imply broader development of the other sectors of the economy or large-scale job creation. For example, the Oyu Tolgoi project currently employs about

15,000 workers during the construction phase, or roughly 0.14 percent of Mongolia's labor force, and will employ only about 3500 during production. Such low employment generation is a common feature of such large mining projects. The non-renewable nature also implies that care must be taken to avoid the "Dutch Disease", the phenomenon in which the rise in value of natural resource exports results in an appreciation in the real exchange rate, reducing international competitiveness that hurts the tradable sectors, such as manufacturing or agriculture, that are viewed as the sources of sustainable growth. And, most importantly, mineral resource revenues significantly increase opportunities for corruption, a risk that is particularly acute in Mongolia given the scale and pace of the change, and the already close connections between political and construction industry circles.

3. Mongolia is very vulnerable given its heavy dependence on natural resources. As Figure 1 shows, mining directly accounts for 20 percent of the economy and approximately 85 percent of exports, by far the largest share in East Asia and the Pacific, and more in line with the proportions of the oil-producing Gulf states. This dependence will only increase once Oyu Tolgoi and Tavan Tolgoi go into full production over the next decade and Mongolia's annual copper and coal output increases four-fold in terms of volume as compared to today. By 2016, mining is expected to contribute to more than half of GDP and 95 percent of exports.

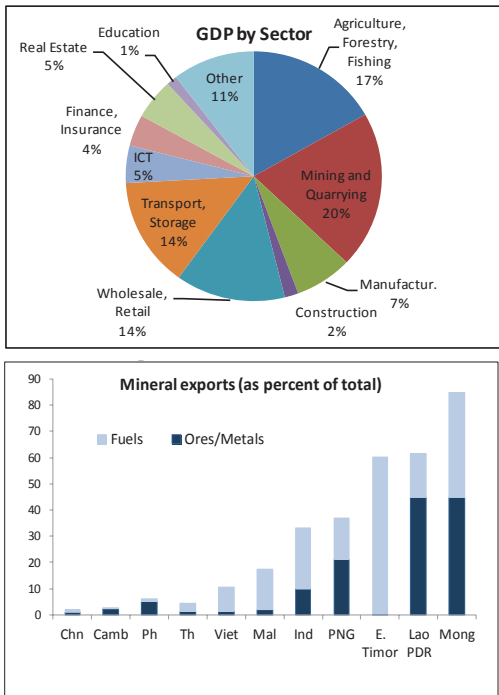
4. The main mechanism for avoiding these problems and achieving sustained growth through a diversified economy will be public investments in infrastructure, education, and health to provide public goods, address market failures, crowd in private investments, and achieve redistributive goals.¹ Tax revenue

¹ IMF (2012) suggests a rethinking of standard IMF policy advice for resource rich developing countries. It notes that given that such countries are capital scarce and are likely to have high returns to domestic investment, an optimal resource allocation strategy should have a significant domestic investment component. Therefore, straight savings in foreign assets, as for example in Chile and Norway, may not be as advisable.

collections are high in Mongolia at around 35 percent of GDP, and with mineral revenues accounting for a third of government revenues. These revenues are projected to triple in the next seven years as Oyu Tolgoi and Tavan Tогоi go into full production, and increase steadily thereafter with the growth of the mining economy (Figure 2).

5. The key challenge will be to effectively use these increasing revenues, with the major responsibility falling on the Government's public investment system for planning and implementing capital projects. The objective of this report is to analyze in depth the current public investment management system and to assess whether or not it is able to meet this challenge of delivering good quality projects in the priority areas in a macro-economically sustainable manner; and to recommend what needs to be done to improve the system so that it is able to effectively transform natural resource revenues into sustainable capital assets.

Figure 1: Mongolia is more heavily dependent on mineral resources compared to other countries in East Asia

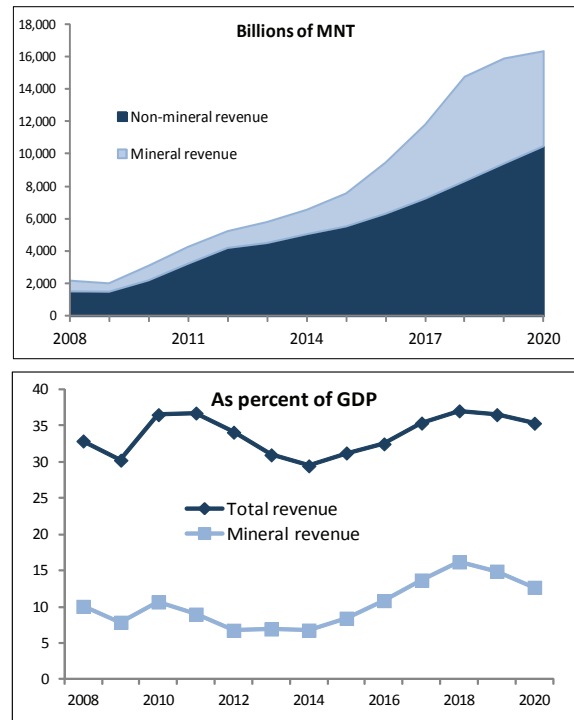


Source: National Statistical Office (NSO); Bank staff calculations

THE NEEDS

6. Mongolia's infrastructure needs are considerable. Its population of 2.8 million people is spread out over an area of 1.5 million square kilometers (the 19th largest country in the world by area) making it the least densely populated country in the world, at 1.8 persons per square kilometer. Given that the capital city of Ulaanbaatar has over 1.2 million inhabitants most of the country has less than 1 person per square kilometer. The scarce population scattered over a large land area, combined with the extreme climate, implies that the unit cost of providing infrastructure such as roads, water, and electricity, as well as services, for much of the country is very high.

Figure 2: Government revenues are projected to increase rapidly over the medium to long term



Source: World Bank staff projections

7. Given these challenges of geography, it is not surprising that Mongolia's infrastructure is relatively under-developed. Its current network of 49,000 km of roads implies a road density of 0.03 km per square kilometers of area, considerably lower than other Asian countries,

though similar to other scarcely populated countries such as Botswana, Kazakhstan, Australia, and Canada (Figure 3). Only 6500 km of this network however, are engineered roads (paved, gravel, or improved earth) with the rest being natural tracks formed through repeated use. Because of Mongolia's terrain, these tracks can offer reasonable driving conditions, but are prone to closures during winter and clearly are not as efficient as paved roads. Although Mongolia lies at the border of East Asia and Central Europe, from an analytical perspective it has much in common with Pacific island states. Apart from having a small population, Mongolia also faces high transport costs. It is not as remote from major markets as these island countries, yet transport across land tends to be more costly than maritime shipments, increasing the cost associated with distance.² Mongolia's regional ranking on the World Bank's Logistics Performance Index³ places it close to the Solomon Islands, Papua New Guinea, and Timor Leste and distinctively below all other East Asian countries (Figure 4).

8. The power sector faces similar problems, with 92 percent of the country's power being supplied by socialist era coal-fired power plants which are inefficient and unreliable. Since 2000 Mongolia's energy demand has been increasing faster than economic growth and losses in the transmission and distribution systems are high (technical losses were about 12.5 percent in distribution and about 3 percent in transmission on average). Peak demand of Mongolia's electricity systems is estimated to double from 570 MW in 2005 to 1,099 MW in 2014.

² Lamão and Venables (2001) estimate that ground transport is about seven times more expensive than sea transport.

³ The index is based on surveys conducted by the World Bank in partnership with academic and international institutions and private companies and individuals engaged in international logistics. Respondents evaluate eight markets on six core dimensions (e.g. the quality of infrastructure and competitive transport pricing). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighboring countries that connect them with international markets. Respondents evaluated the quality of trade and transport related infrastructure on a scale from 1 (worst) to 5 (best). See Arvis et al. (2010) for more details.

Figure 3: Road density in comparative perspective

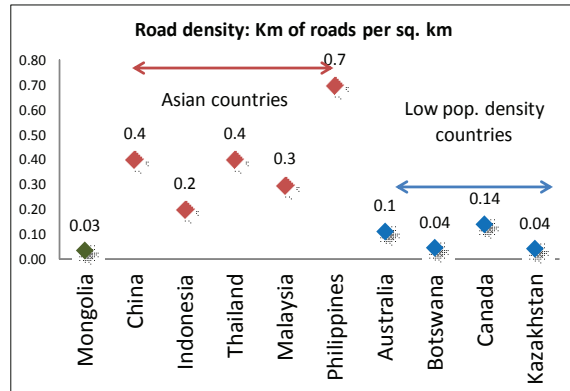
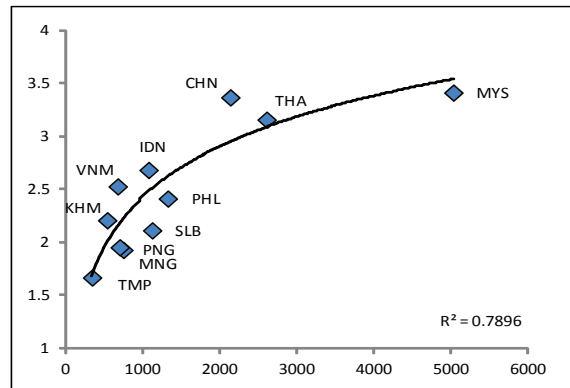


Figure 4: Transport performance

(x-axis: GDP per capita; y-axis: World Bank Logistics Performance Index)



Source: World Development Indicators

Note: Mongolia (MNG); Solomon Islands (SLB); Papua New Guinea (PNG); Timor Leste (TMP).

9. The infrastructure that exists is of poor quality. The 2011-12 Global Competitiveness report ranked Mongolia 118th of 142 countries on infrastructure quality. Currently 60% of the national engineered roads are in "poor" condition requiring significant repair or complete rehabilitation (this classification is based on standard criteria developed by the Department of Roads, the implementing unit of the Ministry of Roads and Transportation). The number of annual power outages has increased forty-fold over the past five years, from 6 in 2006 to 238 in 2010.

10. Mongolia's infrastructure development has been unable to keep pace with the burgeoning demand and is approaching a breaking point in the capital city of Ulaanbaatar. The number

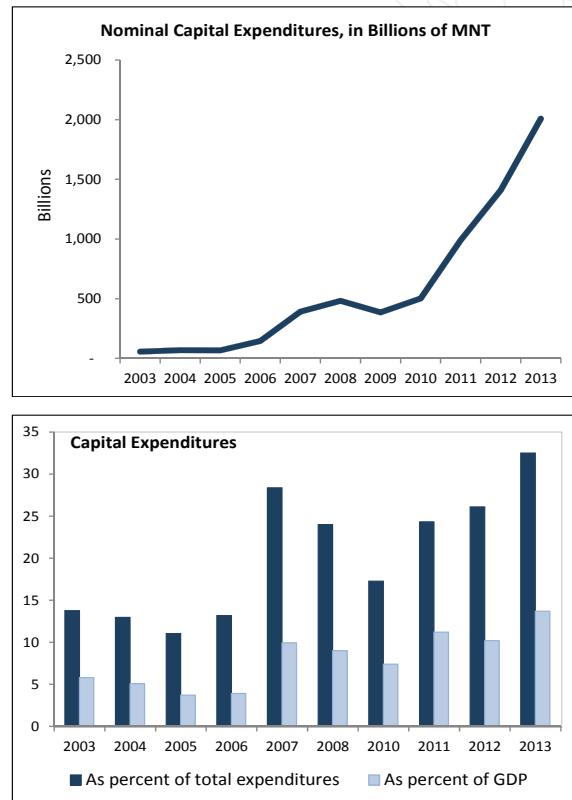
of vehicles has been growing at 12 percent annually since the transition from socialism in 1990, with the pace accelerating since the mining boom, resulting in severe congestion in Ulaanbaatar — the average recorded speed in the city center fell by half between 1998 and 2008 (from 45 km/h to 23 km/h), and has almost certainly fallen further since then.⁴ The peri-urban informal settlements, or “ger areas”, are home to about 60 percent of Ulaanbaatar’s residents and are virtually not served by the city’s heating, water supply, and sanitation network. In the winter months, residents are forced to burn coal for heating, and the resulting smog has given Ulaanbaatar the dubious distinction of being the world’s most polluted city in the winter to add to its rank as the coldest capital city. The poor condition of unplanned and unstructured earthen roads in the ger areas is a major problem for the residents as many portions of these roads are impassable for vehicles, have drainage problems, pose traffic safety hazards and are the source of a substantial amount of dust. Solid waste collection from the ger areas is unreliable and infrequent — once a month or even once in three months — with obvious unpleasant consequences and health hazards.⁵

THE PLANS AND FINANCING

11. The Government has ambitious plans to meet these infrastructure needs. Mongolia’s medium term infrastructure investment plans, as specified in sectoral master plans and the draft National Medium Term Development Strategy amount to approximately \$45 billion over the period 2011-2016, or over five times the 2011 GDP, with major investments anticipated in roads, railways, electricity, and an industrial park. While there is little doubt about the overall scale of the infrastructure development requirements, estimating these with some degree of precision is not easy as it is unclear whether all the investments specified in these plans need to be implemented by the government, and what should be the prioritization and sequencing of the investments.

⁴ ADB (2011)
⁵ World Bank (2010a)

Figure 5: Growth in government capital expenditures, 2003-2011



Source: MoF and NSO data

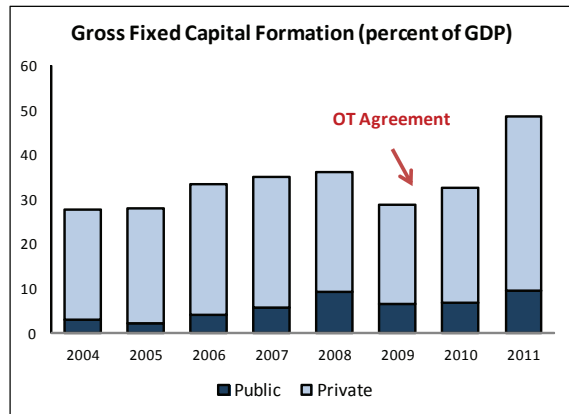
12. To take the example of the road sector, the Ministry of Roads and Transportation’s “Midterm Program to Strengthen the Capacity of Road Transport Sector”, includes the restoration of 350 km roads, the construction of 212 km of new paved roads and 7 bridge crossings in Ulaanbaatar. Outside the capital, the program will create 5,572 km of new paved roads linking *aimag* (province) centers to the capital and nearest check points and 990 km of highways along the international trade corridors. If successfully implemented, 95 percent of the Mongolian national road network will be paved by 2016. The total investment planned for these road works is estimated at \$5 billion, or 50 percent of 2011 GDP. Clearly, not all of these plans can be implemented in the expected time frame, and as this report will argue, some logical prioritization of the infrastructure based on its contribution to national economic growth needs to be made.

13. In 2010, the parliament approved a new policy on railways that outlines the construction of 5600km of new railways in three phases, with an anticipated cost of \$6 billion, connecting the main strategic copper and coal deposits in Southern Gobi to border crossings to China in the South and Russia in the Northeast. Phase I, of 1800km, connecting Dalanzadgad, Tavan Tolgoi, Sainshand, and Choibalsan is currently at the feasibility stage.

14. The Government is also in the feasibility stage of developing a large industrial park in the south Gobi town of Sainshand. The project objective is to construct coking coal, metallurgy, coal gasification, copper smelting, construction materials and petroleum refinery industries through private investment. These projects will form an industrial complex and are aimed to be developed in parallel with the railroad project, at an anticipated cost of \$9 billion. Again, the feasibility of the industrial park, both in terms of its current proposed location as well as the choice of industries, will need to be carefully evaluated before any public funds are spent.

15. Before the mining boom, Mongolia relied largely on overseas development assistance to finance capital expenditures. Budget funded capital expenditures have ballooned since 2005, increasing twenty-fold in nominal terms, or an average annual increase of 53 percent, and rising from 11 percent of government expenditures and 4 percent of GDP to a budgeted 35 percent of expenditures and 14 percent of GDP (Figure 5) for 2013. Almost all of these expenditures are by the central government, although this situation is changing with the significant decentralization introduced with the new Integrated Budget Law of 2011. Investments are rapidly increasing in general, particularly after the construction of the Oyu Tolgoi mine commenced in 2010 following the investment agreement, with gross fixed capital formation rising from 27 percent of GDP in 2005 to 49 percent of GDP in 2011 (Figure 6).

Figure 6: Investments are rapidly increasing overall



Source: NSO data

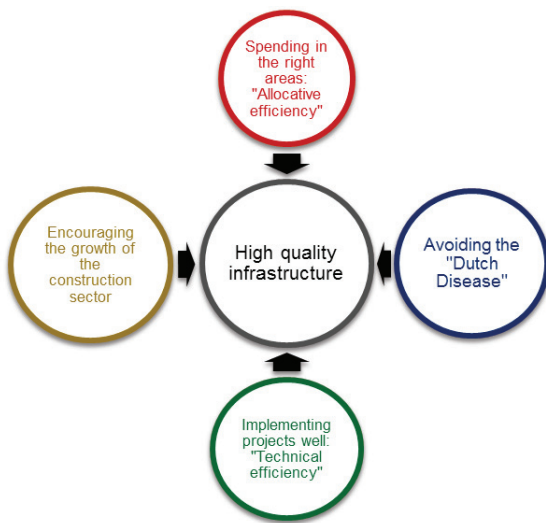
16. The Government also plans to finance the ambitious development agenda through other sources such as public-private partnerships (PPPs) and loans from the newly formed Development Bank of Mongolia (DBM). For example, the Sainshand Industrial Complex Project is expected to be implemented through PPPs, and there are a number of “Build-Transfer” (BT) roads and power schemes currently under implementation. The legal environment of PPP investment consists of Government policy on Public-Private Partnership (2009), the Concessions Law (2010), and the Integrated Budget Law (2011). In 2011, the Government established the DBM to provide financing for long-term infrastructure projects. The DBM is governed by the Law of the Development Bank of Mongolia (2011), which specifies that it has a mandate to finance “large-scale development projects” approved by the parliament based on borrowings from domestic and international capital markets. To date, the DBM has raised \$600 million from a government guaranteed international bond flotation, and will use these resources to finance the above-mentioned railway project, roads, power supply, low-cost housing, and potentially the Sainshand industrial complex.

THE ANALYTICAL FRAMEWORK

17. The challenge for Mongolian policy-makers will be to ensure that these rapidly increasing financial resources — from tax revenues, from

the DBM, and from private financing — are effectively utilized to meet the considerable infrastructure needs. Irrespective of these financing sources, much of this infrastructure spending will be publicly funded and implemented, and publicly guaranteed, placing great demands on the Government’s systems for fiscal policy, public investment planning, capital budgeting, project implementation, and project monitoring.

Figure 7: Conceptual framework for infrastructure provision



18. Figure 7 illustrates a conceptual framework for thinking about this challenge. First, spending should aim to achieve “allocative efficiency” by shifting resources from less productive sectors to more productive ones (“spending in the right areas”). While financing will be less of a constraint in Mongolia than many other developing countries, the needs will clearly outweigh the available resources, at least in the near future, and therefore some hard decisions about infrastructure prioritization will have to be made. Second, public expenditures will need to be grounded in a sound macro-fiscal framework for long term fiscal sustainability, which is particularly important for natural resource rich economies characterized by commodity price volatility. In particular the government will have to carefully modulate its investment spending decisions so as to avoid Dutch disease effects from an investment spending boom

and to ensure that the absorptive capacity of the economy is sufficient. Third, the public investment management system should be sound so that that capital projects are well prepared, and implemented in a transparent and cost effective manner (“technical efficiency”). Finally, the construction sector has to be able to effectively respond and meet these increasing demands placed on it by the government, and therefore the investment climate should be such as to encourage the growth of the sector, thereby increasing the absorptive capacity of the economy.

19. As the next chapter will argue, Mongolia faces problems in each of these areas that need to be urgently addressed if it is to effectively meet this challenge of scaling up infrastructure. Chapter 3 then presents some suggestions on the main reforms needed in public investment planning and budgeting, infrastructure financing, public procurement, improving transparency and oversight, and in the investment climate to encourage the growth of the construction sector.

20. The encouraging signs are that key stakeholders in both the executive and legislative branches of government are well aware of these problems and have recently enacted some ground-breaking reforms that *if* effectively implemented could go a long way towards addressing these challenges (Box 1). These include the passage of fiscal responsibility legislation — the Fiscal Stability Law (FSL, 2010) — to reduce the risks of macroeconomic instability; an integrated Budget Law (IBL, 2011) to improve the comprehensiveness of the budget, and strengthen public investment planning and capital budgeting; and the revised Public Procurement Law of Mongolia (PPLM, 2011) to improve the capacity and transparency of public procurement.

BOX 1: RECENT KEY NEW PIECES OF PUBLIC EXPENDITURE LEGISLATION IN MONGOLIA

The Fiscal Stability law (FSL, 2010): The Fiscal Stability Law (FSL) introduces four fiscal rules to deal with mineral price volatility and Dutch disease effects. First, it mandates that structural or long term mineral prices will be used to calculate budget revenues. Second, every year the budget will have to be below a maximum allowable structural deficit (expenditures minus structural revenues) of 2 percent of GDP. Third, given that the volume of mineral production will be rapidly increasing, the annual growth of government expenditure shall not exceed non-mineral GDP growth so as to reduce the risks of real exchange rate appreciation from a spending boom. And fourth, to maintain long-term fiscal solvency, the debt-to-GDP ratio will be maintained at below 40 percent. All revenues above structural revenues are saved in a Fiscal Stability Fund, which shall be not less than 5 percent of GDP in any given year. The law goes into effect January 2013.

The Budget Law (IBL, 2011): The Budget Law of Mongolia (IBL), which went into effect January 2012, is a comprehensive law that replaces the Public Sector Management and Finance Law (PSMFL) as the primary budget legislation for the country. The main objectives of the IBL are to: strengthen the medium term fiscal framework (MTFF) and ensure fiscal stability; improve the comprehensiveness of the budget; strengthen the public investment planning and capital budgeting process; ensure efficient financial management; significantly increase the authorities and financial resources of local governments; strengthen accountability through participatory budgeting.

The law explicitly states that the budget consists of the state (central government) budget, the Human Development Fund, and the Social Insurance Fund, that the budget should list projects to be executed through concessions contracts, and includes information on government guarantees and contingent liabilities, thereby improving the budget's comprehensiveness. The budget calendar is laid out in detail with the process commencing with the approval of the MTFF by the parliament by June 1, together with the Socio-economic Guidelines, and which forms the basis for the line ministries ceilings (for recurrent and capital expenditures). Line ministry proposals, and those of the National Development and Innovation Committee (NDIC) for large projects, as discussed below, are meant to comply within the limits imposed by these ceilings. This provision should significantly improve the credibility of the budget process.

The IBL significantly strengthens public investment planning and capital budgeting, thereby redressing a major weakness in the PSMFL. It mandates that only projects that have gone through a proper appraisal process will be considered for financing, and introduces the concept of a rolling four-year Public Investment Program (PIP) for large projects (greater than 30 billion MNT) as a stock of potentially financeable projects that have passed a pre-feasibility study. The NDIC has the responsibility to conduct these pre-feasibility studies on line ministry proposals and to determine which projects enter the PIP, with the approval of the PIP resting with the Cabinet. All financing decisions — whether to fund projects from the budget, loans, concessions, or the Development Bank of Mongolia — are then made by the Ministry of Finance (MoF), abiding by the good principle of the MoF as a single point of control on such matters. Importantly, the recurrent cost implications of the capital projects also need to be included in line ministry proposals and are an integral part of the capital budgeting process. The IBL also introduces the provision of carry-over funding — i.e. the authorization to spend unused funds in the subsequent fiscal year — for multi-year capital projects thereby potentially improving project execution.

The authorities of local governments have been significantly enhanced, with the capital city and aimag governments responsible for basic education, primary healthcare, urban planning and construction, social welfare services, water supply and sewerage, public transport, urban roads and bridges, and municipal services such as street lighting and garbage removal. These functions

will be financed through local taxes and fiscal transfers (an equalization grant) from shared taxes from the central government, with the transfer formula based on population, population density, remoteness and size of the local government, and level of local development. There is also a conditional performance element to the transfers that are linked to local tax effort. Only the capital city government is allowed, with the approval of the MoF, to borrow from capital markets to finance public investment projects, with the debt limited to the previous year's revenue and debt service limited to 15% of the previous year's revenue.

The Public Procurement Law of Mongolia (PPLM, 2011): The PPLM, which will go into effect January 2013, introduces radical changes in the system for public procurement in Mongolia. It takes away procurement responsibility from line ministries and gives it to a new Central Procurement Agency (CPA) for national level projects and to local governments for local level projects. The CPA will be responsible for all procurements of large projects — inter-regional roads, power plants etc — as well as for establishing framework agreements for common use items (such as office supplies) that will then be purchased by line ministries. Local governments will be responsible for all procurements of works, goods, and services to be financed from the local budget, as well as for local projects (e.g. schools and hospitals) financed from the national budget. The most novel aspect of the revised law, the new role for civil society organizations in both bid evaluation and the monitoring of contracts, with the latter potentially covering both monitoring the implementation of on-going contracts as well as gauging end-users' satisfaction with completed contracts. If implemented effectively, these provisions will make Mongolia unique among developing countries in institutionalizing civil society oversight over government public expenditure management.

21. These laws are still in the process of going into effect and the challenges of implementation will be many. For example, there are several nuances to the laws that need to be clearly spelled out in the implementing regulations in order to ensure that all stakeholders have a clear understanding of the new modalities. Other laws, such as the Law on the Development Bank of Mongolia and the Concessions Law, may undermine these legislative reforms, in particular given the countervailing pressures for significant off-budget financing of infrastructure that if gone unchecked will render the FSL in effect toothless. Corruption is a significant concern, particularly because of the close overlays between political, mining, and construction industry circles that reformers are trying to also boldly address through the recent passage of the Law on Conflict of Interest (2012) and the Right to Information Law (2011). There is also a significant lack of coordination between the key agencies involved, namely the infrastructure ministries, the Ministry of Finance, and the Ministry of Economic Development that will compromise the IBL if not addressed. Similarly coordination between line ministries, local governments, and the recently established central procurement agency will be critical for

effective implementation of the PPLM. And the Government will need to significantly improve its human resource capacity while working around the relatively fixed constraint of labor scarcity.

22. Mongolia's underlying political economy is also suggestive of risks as well as reform possibilities. Mongolia, a multi-party parliamentary democracy, shares some of the common problems of patronage-based politics — commonly referred to as "clientelism" or "neo-patrimonialism" in the academic literature — problems that the resource-curse literature has emphasized are likely to become worse once natural resource rents start flowing in.⁶ However, unlike many of the sub-Saharan African countries, there are a number of positive features of Mongolia's political institutions that are a source of hope. First, compared to other young democracies, Mongolia has a relatively stable party system with two large parties, and one or two other smaller parties, and this existence of at least two parties that are capable of winning office greatly enhances electoral accountability. Second, although Mongolia's political parties are factionalized they are more programmatic — i.e. have some shared corporate policy objectives — and disciplined than is the

⁶ Humphreys, Sachs, and Stiglitz (2007), Collier (2010).

case in many other developing countries. Third, there is little prospect of an extra-constitutional intervention (e.g. military coup), thereby implying that Mongolian policy-makers have longer time horizons than many of their developing country counterparts. Fourth, Mongolia is not riven by ethno-linguistic cleavages, which is a major advantage given that in resource rich countries the combination of ethnic rivalries and resource rents has often proven to be explosive. Fifth, Mongolia is still a relatively egalitarian society that does not have traditional, landed elites or other “oligarchs” that dominate the economic and political landscape (although this is changing with the recent rapid growth). Sixth, there is a vibrant and free press, and numerous civil society advocacy groups, that can provide the necessary checks on the executive. Finally, in large part due to the legacy of communism, the education level of the population is high compared to other countries at similar income levels, increasing the ability of the population to hold policy-makers accountable.

23. These positive features suggest that Mongolian policy-makers should in theory be able to cooperate to achieve reforms. The resource boom however, also implies that the political economy environment, like the economy, is also highly dynamic and rapidly changing. Unless some of the reforms discussed in this report are enacted quickly there is a real risk that a few privileged elites could capture both the natural resource rents as well as the political system. There is a general recognition among policy circles in Mongolia that the old economic and political equilibrium is being disrupted by the staggering economic transformation underway, and that safeguards have to be urgently put in place to ensure that the new equilibrium that emerges is one of “inclusive” economic and political institutions that enable the largest possible number of Mongolians to participate in and benefit from the resource boom.⁷

WHAT THIS REPORT DOES NOT COVER

24. This report largely limits itself to the analysis of the central government’s public investment system, and it does so mainly with reference

to one infrastructure sector, namely roads. It is therefore a deliberately incomplete analysis of the challenge of scaling up infrastructure. It does not cover local government spending, mainly because Mongolia is currently highly fiscally centralized (though this will change starting in 2013) with the central government accounting to well over 90 percent of spending. It also does not cover several important sector-specific issues pertaining to the electricity, heating, roads, water, and sanitation sectors such as the regulatory regime, tariffs, user fees, institutional structure, sector governance, and capacity. This limitation is both because such a comprehensive assessment is beyond the scope of this study and also because the World Bank has done three major sector-specific infrastructure assessments of Mongolia in the past five years.⁸

25. The World Bank (2007) report for example, does a broad sweep of the infrastructure agenda and provides a number of recommendations for improving infrastructure that remain relevant today, including: better aligning pricing with costs through ensuring that tariffs are sufficient for cost recovery, particularly in the electricity, heating, and transport sectors; the elimination of regressive subsidies; improving sector efficiency and governance through greater independence of energy and water supply and sanitation regulatory bodies; increased community participation in sector decision-making; reforms of state-owned utilities, in particular through consolidation of retail water provision services and introduction of independent boards of directors; and improved planning and project implementation.

26. This report supplements this broader study by going in-depth into this last area of public investment management, and identifying some of the main issues that need to be urgently addressed if Mongolia is to meet the challenge of scaling up infrastructure. This narrower, more in-depth assessment is necessary given that this is an area where significant reform efforts are currently underway, but also where major risks are emerging.

⁷ Acemoglu and Robinson (2012) distinguish between “extractive” and “inclusive” political institutions.

⁸ See World Bank (2007), World Bank (2009), and World Bank (2010a).

CHAPTER 2:

KEY PROBLEMS THAT NEED TO BE ADDRESSED

27. This chapter will argue that to date the Government has been unable to effectively achieve the broad requirements for meeting the challenge of scaling up infrastructure. Unpacking each of the four elements in the analytical framework reveals the following major problems that need to be urgently addressed:

Spending in the right areas:

- Insufficient infrastructure spending on the geographic centers of economic growth — the “growth poles” — in particular Ulaanbaatar.
- A highly fragmented capital budget with a large number of small geographically targeted projects.
- A relative neglect of infrastructure maintenance resulting in the very poor condition of the existing capital stock.

Avoiding the “Dutch Disease”:

- A highly pro-cyclical fiscal policy that resulted in one “boom-and-bust” cycle in 2008-09. The Fiscal Stability Law of 2010 is meant to address this problem through fiscal rules controlling volatility and excessive expenditure growth, but there is a risk that the FSL will be undermined through significant off-budget infrastructure financing.

Implementing projects well:

- Poor project preparation due to limited project appraisal, poor coordination between the MoF and the MED, and excessive powers of the parliament to insert poorly designed projects in the capital budget.
- Lack of transparency and capacity in public procurement, and politically motivated award of contracts that result in a low value for money of infrastructure projects as measured by time and cost over-runs.

- An annual capital budget appropriation structure that is not well-suited to the multi-year nature of capital projects, particularly given Mongolia’s short construction season, which creates pressures to disburse before the end of the fiscal year and before the projects have been sufficiently executed.

Encouraging the growth of the construction sector:

- Regulatory restrictions that are hurting the growth of the construction industry with the result that increased capital spending is out of sync with the absorptive capacity of the economy, resulting in soaring prices of construction materials.

NOT SPENDING IN THE RIGHT AREAS

28. Mongolian policy-makers are not making the best use of their budgetary resources and are under-spending on high priority areas and over-spending on lower priority areas, with the result that the budget is not being used to maximize the productive potential of the economy. This point is not to suggest that redistributive or regional equality issues are not important; all governments have to balance the needs of economic growth with those of equity. Rather, the balance is particularly skewed in Mongolia, to the detriment of the twin objectives of growth and poverty reduction.

29. The academic field of economic geography provides the overall principles on where infrastructure should be prioritized and how its provision should be phased. Generally, economic growth is highest in geographically concentrated regions, like cities or larger metropolitan areas.⁹ The reason is that the concentration of businesses allows for forward and backward linkages, as firms cater to the business needs of other firms in their proximity,

⁹ Glaeser (2011).

creating more integrated supply networks and value chains. The proximity of firms reduces transport costs, increasing the attraction of the concentration of business. The concentration of people in a particular location breeds innovation as it reduces the costs of communications and encourages knowledge spillovers, increasing returns to scale, and the scope for specialization on specific business lines that can enhance the productivity of businesses that operate in close proximity. “Growth poles” are these geographic areas where business agglomerate.

30. The World Bank’s 2009 World Development Report (WDR), entitled *Reshaping Economic Geography*, lays out an analytical framework that helps policymakers to determine policies that foster such growth poles. Economic growth is always spatially concentrated — globally, nationally, and locally. Where private enterprise is unconstrained, agglomeration is a natural process as it makes business sense for companies to locate next to other companies for the reasons stated above. The guiding principle for infrastructure provision then is to support both economic growth in the growth poles and increased economic integration so that people, goods, and services can move between the growth poles and the lagging regions. In other words, infrastructure is the key for both economic growth and the convergence of living standards across the country despite the concentration of economic activity.

31. Political economy provides another guiding principle for infrastructure provision. Regional integration is necessary for politicians’ re-election. Most Mongolian parliamentarians are elected from specific geographical constituencies and need to demonstrate the benefits of mining to these communities through, among other measures, the development of local infrastructure.¹⁰ While some of these investments, such as *soum* (district) roads and *soum* electrification, may not be allocatively efficient given the prioritization of infrastructure over the medium term, they are politically rational and will therefore place

further financing demands on the country. The Government will be faced with a challenge of supporting growth poles while facing pressures from politicians to meet the demands of their political constituencies. The key is achieving the right balance between these twin objectives.

32. There are several indicators that this balance is not being achieved in Mongolia with regards to the infrastructure sectors. First, the growth pole of Ulaanbaatar has been significantly neglected compared to the rural areas. Second, the government’s medium term plans emphasize huge industrial parks that carry high risks and may not be well suited to the country’s comparative advantage. Third, the capital budget is fragmented with a portfolio skewed towards a large number of small projects spread across sectors and regions and an underfunding of large infrastructure investments that are critical for economic growth. Fourth, capital maintenance has been under-prioritized compared to new investments, with the result that infrastructure assets are in a considerable state of disrepair.

The relative neglect of the “growth poles”

33. According to the 2009 WDR, how much government involvement — and what set of particular actions — is sensible depends on a specific country’s stage of urban development (Table 1). The first and most basic stage is one where growth poles are not yet identifiable, and in these societies the government should encourage the development of growth poles by creating the conditions for businesses to agglomerate. “Incipient urbanization” is associated with agricultural societies, marked by populations scattered across the country in villages and small towns. The secondary and tertiary sectors in these countries are not yet developed as industrialization is in its infancy. In these cases, a government’s prerogative is to build the institutional foundations for development. These institutions are spatially ‘blind’, meaning that policies should not target the development of specific regions. Experience shows that economies perform better when the private and not the public

¹⁰ With recent electoral reforms, the Mongolian electoral system is now a mixed one with two-thirds of the seats in parliaments elected from geographic constituencies based on a “first-past-the post” system and one-third elected from national party lists based on a proportional representation system.

sector determines which regions have the largest potential for economic expansion. Key institutions relate to property rights, particularly a clear legal framework for the ownership of land, an investment climate conducive to the development of the private sector, and sound

macroeconomic policy, including a strong fiscal framework and prudent, growth-supporting monetary policy. A legal environment that allows factors of production to move to their most productive use is tantamount for growth poles to emerge.

Table 1: The three stages of urban development

Area			
	<i>Incipient urbanization</i>	<i>Intermediate urbanization</i>	<i>Advanced urbanization</i>
Urban shares	Less than 25 percent	About 50 percent	More than 75 percent
Policy priority	Build density	Build density, reduce distance	Build density, reduce distance, eliminate division
Instruments for integration			
Institutions	Land rights, basic education, health, water, and sanitation	Land use regulations; universal provision of basic and social services	Land use regulation and land taxation; universal provision of basic and social services
Infrastructure		Transport infrastructure	Transport infrastructure; demand management
Interventions			Slum area development; programs to reduce crime and environmental degradation

Source: 2009 WDR: *Reshaping Economic Geography*

34. Countries at the second stage of urbanization - "intermediate urbanization" - already exhibit emergent growth poles. Once businesses have started agglomerating in certain regions, governments can play a role in accelerating the clustering of firms by providing infrastructure. To a large extent, this implies building transport infrastructure connecting economic centers, reducing transportation costs, and thus creating incentives for more firms to set up production near to the growth poles. More broadly, it means that the government becomes more involved in supporting the flow of the factors of production to the nascent growth poles. This goes beyond building roads and railroad links and includes improving health and sanitation as well as educational institutions that attract workers and enhance the human capital of the workforce.

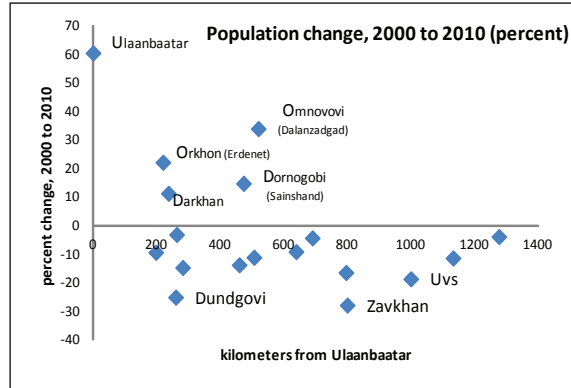
35. It is important to note that migration toward the growth poles at this stage should be encouraged as labor, like other factors of production, will be put to its best economic use in industrial hubs. Indeed, in most countries the extent of internal migration is considerably higher than cross-border migration, not necessarily from rural villages to cities but from lagging areas to growth poles. Many people move to more economically dynamic regions in order to find better employment opportunities. These pull factors of agglomeration are productivity-enhancing and should thus be supported by government. In some circumstances, however, it is the push factors that motivate people to leave their homes. In this category fall areas that lack the provision of basic services, including access to health care and education, thus driving people away. Push factors do not necessarily

channel labor to its most productive use which accelerates the congestion of cities without increasing their productivity. Hence, whilst policy should support the pull forces, it should aim to minimize those forces that are pushing people to migrate. Push factors are best mitigated by providing a basic level of public services across the country.

36. Once growth poles have developed, at the third stage of development, governments' main responsibility is to reduce social and economic divisions and to improve the environmental sustainability of agglomeration. This largely focuses on slums that often accompany industrialization and urbanization, providing for more inclusive development among the poorer segments of society. At this stage, governments should thus focus on enhancing the management of existing areas of agglomeration, improving the conditions of businesses, workers, and the unemployed by minimizing negative externalities of industrialization.

37. Spatially targeting dynamic economic areas tends to succeed when applied in an environment where markets are working well — supported by strong legal institutions — where basic services are widely accessible, and connective infrastructure links growth poles to the periphery. Addressing the negative fallouts from urbanization requires that authorities have a legal basis to convert land from agricultural to residential and other purposes; in addition, suburban development requires that public services are adequately provided at the fringes; public transport must be of an appropriate standard to allow workers to commute to business areas, managing the demand for transportation; finally, authorities should focus on reducing crime and addressing potential threats to the environment arising from industrialization and urbanization.

Figure 8: The Mongolian population has been rapidly migrating from the periphery to the growth poles



Source: National Statistical Office

38. At its current stage of development, Mongolia has three growth poles — Ulaanbaatar, the mining regions of south Gobi (Omnogovi and Dornogovi), and the mining areas in the north in the cities of Darkhan and Erdenet — providing relatively clear guidance on where new infrastructure investments should be spatially targeted. These growth poles have seen a considerable increase in population over the past decade (between the two population censuses of 2000 and 2010) through migration from the rural regions, or the “periphery.” As Figure 8 shows, the growth poles have seen a significant increase in population — 60% for Ulaanbaatar and 35% for Omnogovi — with significant depopulation in the periphery, in particular in aimags such as Zavkhan, Dundgovi, and Uvs.

39. Applying the WDR’s analytical framework to the Mongolian regions, the government’s policy should aim to enhance these growth poles. Realistically, the agglomeration effects of mining areas, measured in number of jobs created, including downstream processing activities, will be limited as this sector tends to be capital intensive. For example, in 2009, the mining industry accounted for only 16,000 jobs. The majority of the Mongolian work force will realistically live and work in Ulaanbaatar where jobs, especially in the services sector, will be concentrated.

40. Policy priorities should thus be two-pronged: First, infrastructureshouldbeprovidedthatlowers

distance to density in the mining growth poles in the north and south in order to increase the agglomeration effects and downstream activities in these regions. Transport infrastructure will be particularly important in order to transport the raw materials to processing plants but also to external markets, especially in China, thus reducing the arguably the greatest development challenge to Mongolia, namely transport costs. However, other priorities should include access to electricity, sanitation, health, and education. These policies are most closely related to areas of intermediate urbanization, according to the WDR framework.

41. Second, in line with policies for areas of advanced urbanization, urban planning of Ulaanbaatar should be a priority. While Ulaanbaatar has a population of 1.2 million inhabitants, it is still a small city by regional standards. Better managing the metropolitan area will reduce the negative externalities of urbanization whilst increasing the scope for capturing the benefits from agglomeration.

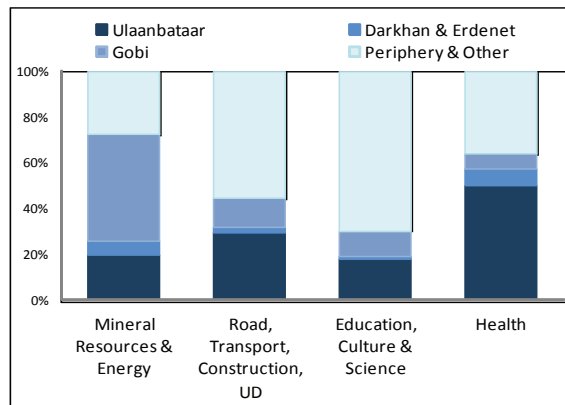
42. An analysis of central government capital spending suggests that the Government is not following this principle (Figure 9). Ulaanbaatar has been relatively neglected in favor of the rural areas, or the periphery, in the energy and roads sectors. In particular the resources the government devotes to roads and bridges seem skewed in favor of the periphery: In 2011, the central government spent 44 percent on growth poles, and only 30 percent on Ulaanbaatar, though this was an increase compared to the averages in the previous years (Figure 10).

43. Promoting urbanization also implies investing in the building and maintenance of a good road and transport infrastructure in the vicinity of cities. However, distance from Ulaanbaatar is not a good predictor of spending on roads and bridges (Figure 11).

44. It should be pointed out upfront that this spending analysis is handicapped by data limitations. The Government's capital budget does not have any information on international donors' grant-funded projects, and only includes those loan funded projects for which there is Government counterpart funding. Many such

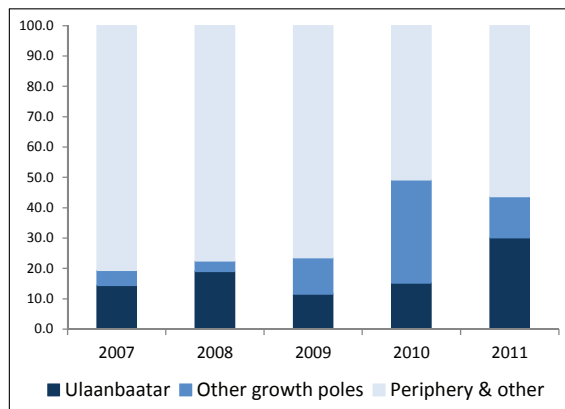
projects, for example the energy and roads projects financed by the Millennium Challenge Corporation, focus on the growth poles and therefore it may be that donor financing is enabling the Government to focus on the periphery. It also does not provide information on local government executed projects, which in 2011 were approximately 10 percent of the national capital budget. Clearly, this points to the need for more comprehensive data on development projects, a shortcoming that the Integrated Budget Law aims to correct. The analysis also does not include the mining-related infrastructure that is being funded by the mining companies themselves (for example, Oyu Tologoi LLC is funding the road to China and power generation).

Figure 9: Ulaanbaatar has been relatively neglected in central government spending on electricity and transport infrastructure (2011 percent distribution of ministry capital budget allocation)



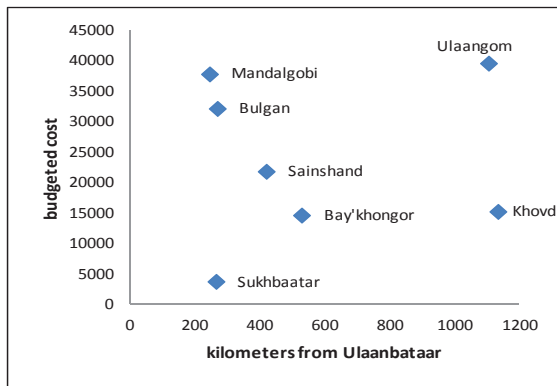
Source: WB staff estimates based on MoF data

Figure 10: The neglect of the growth poles is particularly evident for roads and bridges



45. With this caveat in mind, the Government's spending priorities do not suggest any targeted promotion of agglomeration effects, given that traffic on 64% of the national road network is less than 200 vehicles per day, and on only 7% — urban roads — is it above 1000 vehicles per day. This relative neglect of Ulaanbaatar is obviously visible in increasing traffic congestion. The number of registered vehicles has been growing rapidly since 2004, with two-thirds of the fleet registered in Ulaanbaatar. The result of this growth, combined with the lack of investment in the city's infrastructure, has meant that average recorded traffic speeds in the city have declined from 25 km/h in 1998 to only 14 km/h in 2008. By contrast, there is less need for paved roads in many parts of the country as the dry, flat surfaces enables natural tracks to provide reasonable driving conditions. Indeed the official roads policy until the 1990s considered building paved roads in rural areas as an unnecessary luxury, a fact that is reflected in Mongolia's current road network.¹¹

Figure 11: Distance from Ulaanbaatar is not a good predictor of roads expenditures



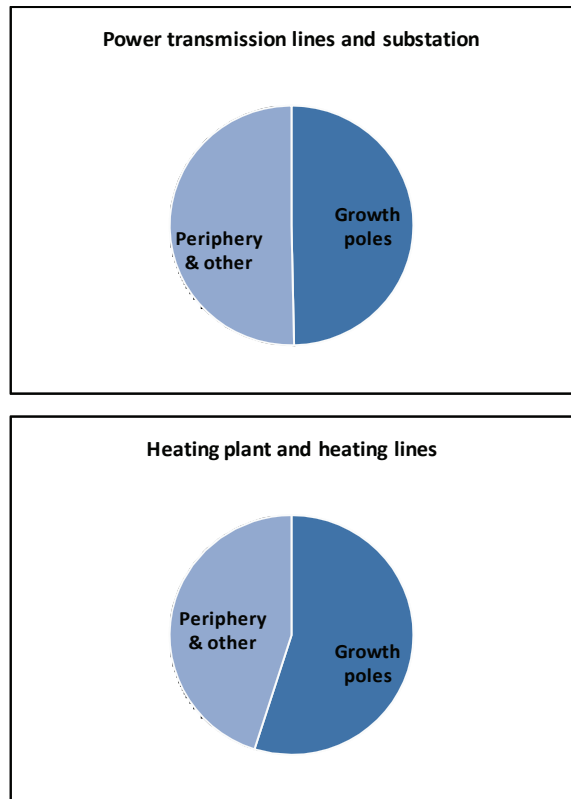
Source: WB staff estimates based on MoF data

46. This is not to say that the rural areas should be neglected. Rather the need for economic integration implies connecting the aimags with each other and Ulaanbaatar *not* so that jobs can move to the countryside, a policy that international experience suggests inevitably fails, but to allow for goods and services to be delivered more easily and cheaply across the country, which will help to equalize

¹¹ ADB (2011).

standards of living across Mongolia. The point is on achieving the right balance between infrastructure for growth, and infrastructure for promoting convergence in living standards, and the appropriate phasing of the two. The appropriate balance and phasing would be to focus on new road construction and road repair in Ulaanbaatar in the immediate term; focus on low cost upgradation of rural roads in the immediate term; and then invest on rural paved roads in the medium term.

Figure 12: Growth poles have also been under-prioritized in government electricity and heating expenditures (2011)



Source: WB staff estimates based on MoF data

47. Spending in the energy sector is similarly skewed, with the growth poles receiving less than half of the investments in power transmission, and slightly more than half of the spending in heating (Figure 12). This spending is less than what is required in terms of current demand — Ulaanbaatar, Erdenet, and Darkhan represent 70 percent of national demand — and are certainly

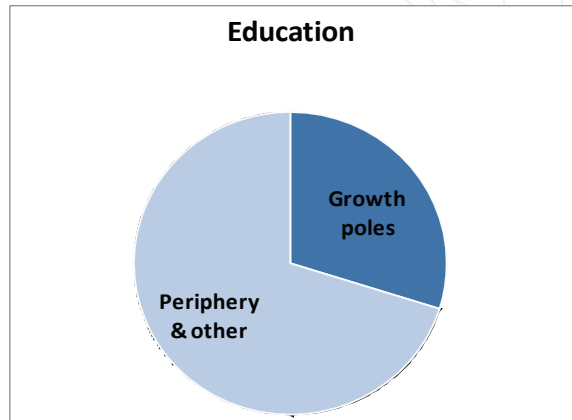
less than what is required going forward given the rapid population growth of Ulaanbaatar and the need to provide ger area residents with more efficient and environmentally cleaner heating systems. The use of raw coal in heat-only boilers and household stoves by ger area households is considered one of the main reasons for the worsening air quality in Ulaanbaatar; yet Ulaanbaatar received less than 20 percent of the Ministry of Mineral Resources and Energy's capital allocation in 2011.

48. By contrast, spending priorities in the social sectors are well aligned with the principles of economic geography which emphasize that while growth poles should be fostered, basic services should continue to be provided at an adequate level across the country. Education and health spending does not seem to depend on distance to Ulaanbaatar which is consistent with the notion that basic services are provided irrespective of the location of growth poles (Figure 13). The variance of education spending across regions is considerable which may reflect the state of already existing education infrastructure.

Poor prioritization in medium-term plans

49. This poor prioritization is also reflected in the medium-term development plans. In the Ministry of Road and Transportation's \$5 billion medium-term road sector strategy, only 21 percent is allocated for Ulaanbaatar's roads as compared to 37 percent for national roads connecting the aimag centers, and 42 percent for highways in the main trade corridors (Figure 14). In terms of prioritization, from a purely technical point of view, it would be more advisable to have a phased strategy with the initial focus over the next five years on (i) on the construction of new north-south trade corridors connecting the mining areas and Ulaanbaatar with the border crossings in Russia and China, through the planned national highways; (ii) the construction and rehabilitation of roads in Ulaanbaatar. The large scale construction of paved roads linking the aimag centers should be deferred to a second phase.

Figure 13: Education spending is spread throughout the country (2011)



Source: WB staff estimates based on MoF data

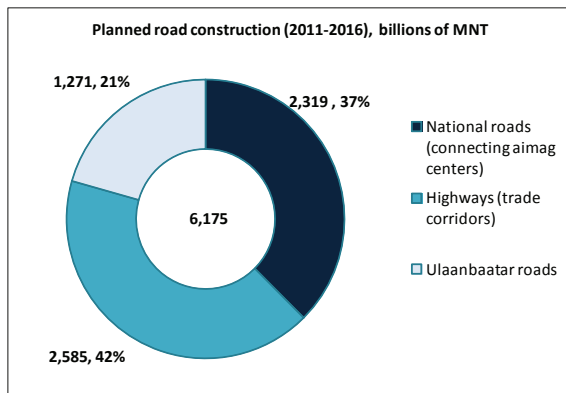
50. Clearly however, the current plans are in large part motivated by the political reality of electoral politics and the perceived need of elected policy-makers to show some results of the mineral boom to the local politician. Therefore, some balance has to be struck between what is economically the "first best option" and what is politically feasible. One option would be to emphasize lower cost upgrading of natural tracks in rural areas so as to enable them to provide all-weather access through the construction of bridges and culverts, and increased maintenance through periodic smoothing of the road surface, thereby providing quick, visible improvements for the users at relatively little cost.¹² This strategy could potentially be both politically and economically rational.

51. Mongolia's 2007-15 National Development Strategy (NDS) emphasizes a need to discourage migration and slow down the urban growth by creating satellite cities and promoting regional centers that will provide employment alternatives. The NDS proposes to develop Baganuur, Nalaikh, and Bagakhangai, all in relative closeness to Ulaanbaatar, as potential satellite towns. Actual spending on these settlements so far has been negligible. However, a feasibility study was carried out in 2011 and 2012 on establishing the industrial park in Sainshand. As the capital city of Dornogobi Province, Sainshand lies to

¹² Ibid.

the south east of Ulaanbaatar, bordering the Gobi desert. According to the latest census its population is below 20,000. It currently does not have dynamic industries and does not qualify as an emerging growth pole. Artificially promoting its development is therefore a risk, considering that the scale of the proposed investment is of the order of 100 percent of GDP.

Figure 14: Mid-term plans also under-emphasize Ulaanbaatar



Source: Department of Roads

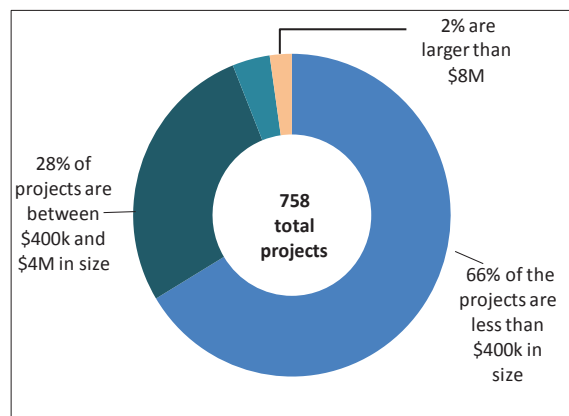
Fragmented capital budget

52. Related to the above point of the neglect of the growth poles, the vast majority of budget-funded capital projects in Mongolia are small and geographically targeted. To take the example of the 2008 capital budget, the total project portfolio for new investments of roughly \$900 million was spread out over 758 projects, implying an average project allocation of \$1.2M. However, the median project size was much lower. As Figure 15 shows, 66% of projects were less than \$400,000 in size (500 million MNT), and another 28% were under \$4 million. If one considers \$8 million (10 billion MNT) as the threshold for a “large project”, then only 2% of the portfolio was made up of these large projects. In terms of cost, these large projects accounted for 40% of the portfolio.

53. Such high fragmentation reduces allocative efficiency for several reasons. First, these projects tend to be uneconomic. Second, fragmentation likely results in duplication and

wasted resources. Third, it likely increases the costs of the public investment portfolio as it forgoes some economies of scale. Fourth, the large number of small projects taxes the limited human resource capacity of the line ministries that prepare and implement these projects, and of the Ministry of Finance that has to screen and approve them to be financed from the budget. It is therefore likely that a portfolio with many smaller projects will be of poorer quality than a portfolio of the same size with fewer, larger projects.

Figure 15: Distribution of investment projects by size, 2008



Source: WB staff estimates based on MoF data

The neglect of maintenance

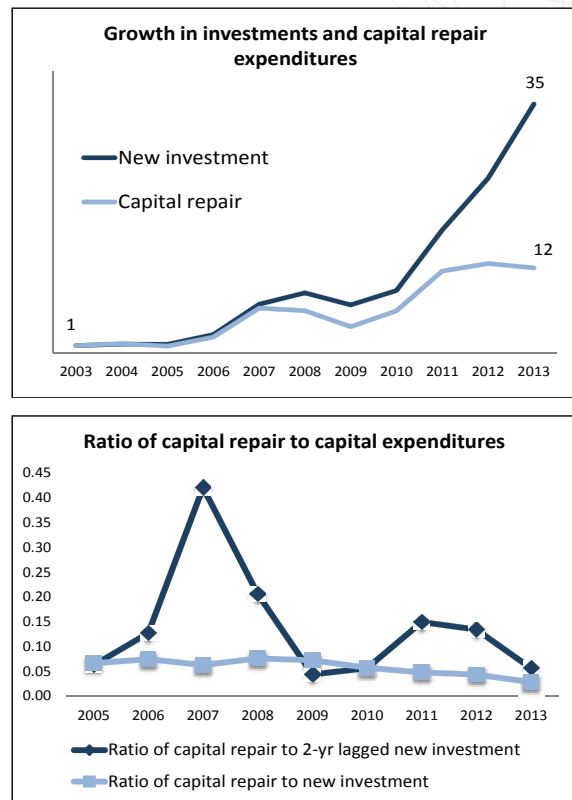
54. Another stark objective indicator of the misallocation of resources in Mongolia is the gross under-spending on capital maintenance and repair in relation to the country’s needs. Due to years of neglect, the state of disrepair in the energy and roads sectors is approaching crisis proportions. The electricity sector has immediate capital repair needs estimated by the Ministry of Fuel and Energy at MNT 170-180 billion (or approximately 2 percent of 2011 GDP), and 60% of the national paved road network is in poor condition and in need of capital repair and rehabilitation, at an estimated cost of MNT 730 billion (or roughly 7 percent of GDP). In Ulaanbaatar, 70 percent of the 629 km paved roads need capital repair as they have exceeded their useful life. However, the government has emphasized new investments

over capital maintenance. As Figure 16 (left panel) shows, the growth in nominal capital repair expenditures (twelve-fold increase since 2003), which includes both periodic maintenance and rehabilitation, has been significantly below the trend in the growth in new investments (thirty-five-fold increase), with the result that the ratio of capital repairs to new investment — both current investment and 2-year lagged investment, to take into account the fact that maintenance needs are for older assets — have, for the most part, been declining since 2007.

55. Detailed assessments of the roads sector underline the systematic neglect of routine maintenance that results in costly renovations and reconstructions later on. The recent ADB roads study estimated that the current spending on roads maintenance in Mongolia was only meeting 20 percent of the routine and periodic maintenance needs, which was below the average of even Sub-Saharan Africa. This neglect is both fiscally and economically costly. Neglecting routine maintenance reduces the lifespan of a road and requires much more costly rehabilitation later on; in Mongolia, the costs of rehabilitating a road can be five to ten times that of periodic maintenance. Poor maintenance also increases transport costs which has a direct impact on reducing economic activity.

56. It is encouraging to note that the government has paid more attention to maintenance in the last two years, tripling capital repair expenditures in nominal terms since 2009, although this growth has leveled off. Much more needs to be done to both meet the periodic maintenance needs and clearing the huge backlog and the trend lines in Figure 16 need to be reversed over the next 5 years, with capital repair expenditures outpacing new investments. It is also encouraging to note that the IBL now clearly specifies that the future maintenance needs of new capital projects have to be explicitly included in the project proposals if they are to be considered for financing.

Figure 16: The under prioritization of capital repairs and maintenance



Source: WB staff estimates based on MoF data
 Note: 2012 and 2013 are budget numbers

PUBLIC INVESTMENTS NOT GROUNDED IN A SOUND MACRO-ECONOMIC STRATEGY

57. Mineral-rich countries need to effectively deal with two macroeconomic challenges: the volatility of mineral prices and real-exchange rate appreciation due to over-spending (the “Dutch Disease”). Mongolia went through a classic boom-and-bust cycle from 2005 to 2009. The economy grew by 9 percent on average between 2004 and 2008, triggering a spending boom that saw the non-mining deficit (i.e., expenditures relative to non-mining revenues) increasing from a deficit of 1 percent of GDP in 2005 to a deficit of over 15 percent of GDP in 2008. Mongolia was then hit hard when the global economic crisis of 2009 caused commodity prices to crash. The economy contracted by 1.3 percent, foreign exchange reserves were quickly depleted, and Mongolia required the assistance of the IMF with the necessary painful fiscal adjustment.

58. The Fiscal Stability Law (FSL), passed by the parliament in June 2010, and which goes into effect in 2013, recognized this problem and put in place fiscal rules to smooth volatility by using long-term prices to estimate mineral revenues and required budgets to comply to a structural deficit of less than 2 percent of GDP; to control expenditure growth to less than nominal GDP growth and therefore avoid overheating of the economy; and to ensure long-term fiscal solvency through caps on public debt. Any excess revenues after the application of these rules are meant to be saved in a Fiscal Stability Fund, which has to maintain funds of at least 5 percent of GDP. Given that future savings are likely to be much higher, Mongolia is currently in the early stages of thinking about a comprehensive Sovereign Wealth Fund, to achieve the objectives of fiscal stabilization and protect the budget and the economy from commodity price volatility; savings, in particular to meet future pension liabilities; and economic development through financing of high priority socio-economic projects.

59. There is a big risk that the FSL will not be effectively implemented through off-budget financing of infrastructure that bypasses the fiscal rules. Specifically this risk is in the shape of (a) “build-transfer” (BT) projects in the roads and energy sectors that were financed by construction companies themselves on the condition of repayment from the budget at a later date; (b) excessive lending by the Development Bank of Mongolia (DBM), in particular for non-revenue generating public infrastructure projects; and (c) a weak regulatory framework for public-private partnerships (PPPs).

“Build-Transfer” schemes

60. In 2008, a Mongolian parliament resolution allowed “build-transfer” (BT) projects in the roads and energy sectors that were financed by construction companies themselves, usually through commercial borrowing, on the condition of repayment from the budget at a later date. These schemes increased from 3 percent of the total value of the budget funded projects

in 2008 to over 25 percent in 2009 and 2010, and continue to be sizeable today (Figure 17). These BT schemes weaken the FSL as spending on them is not reflected in the budget in the current fiscal year, even though the construction activities are taking place, and shows up later when repayments are due. The BT schemes for rural roads are also a particularly expensive financing option as construction companies need to borrow at commercial rates to finance them rendering these projects an estimated 25 percent to 30 percent more expensive than the equivalent budget-funded project. These schemes involve very little transfer of risk from the government to the private sector partner, and the increase in the financing costs of the project — which will eventually be passed back to the budget — is not compensated with any efficiency gains in delivering the services involved.

The Development Bank of Mongolia

61. The DBM is fast becoming the main source of public financing for infrastructure projects in Mongolia. The lending operations of the DBM are not covered under the structural balance or the expenditure rule of the FSL (DBM borrowings are covered under the debt rule). As per the Law on the Development Bank (2011), and a subsequent parliamentary resolution, the DBM is meant to finance the development of the new railways to transport minerals, roads connecting the aimags to Ulaanbaatar and each other, energy sector projects, public housing, including subsidized mortgages to low income households, and the Sainshand industrial park. The DBM raised \$600 million (or 6 percent of GDP) financing from an international, government-guaranteed bond in 2011, and is looking for additional financing options, such as a domestic bond flotation. It may also receive some of the proceeds of the Government’s \$1.5 billion sovereign bond flotation of November 2012. Its project plan for 2012 includes a number of non-revenue generating projects such as rural roads, and financing the operational expenses of the Erdenes Tavan Tolgoi (ETT) state-owned coal mining company. Its roads portfolio alone

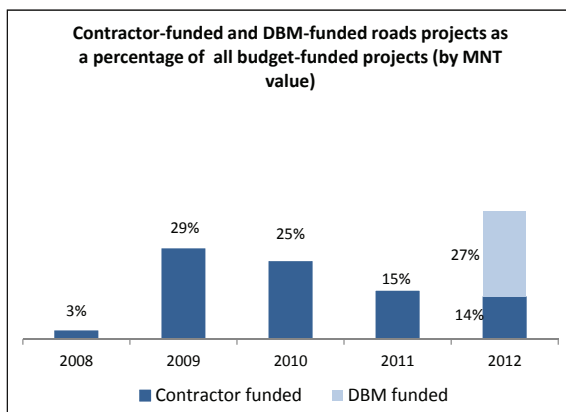
amounts to approximately \$700 million, or 27% of the 2012 total government capital budget in terms of value (Figure 17). The DBM has also issued a guarantee on an \$83 million loan from the China Export-Import Bank for a housing development project.

62. The DBM, if it operates under a sound macroeconomic and corporate governance framework, can play an important role in Mongolia’s infrastructure development. The logic of development banks is one of market failure whereby commercial banks underfund important projects such as long gestation infrastructure projects, or do not provide access to finance to small borrowers. For example, one study by the Business Development Bank of Canada found that the six most common target markets for development banks are: (i) micro-enterprises/start-ups; (ii) small and medium sized enterprises (SMEs); (iii) international trade/globalization; (iv) housing, (v) infrastructure and (vi) rural/agricultural sector.¹³ Implicit in the Government’s decision to establish the DBM is also the issue of timing. While revenues from the mines will start flowing in the future, the infrastructure needs are great, and it is believed that borrowing now to meet these needs is a sensible decision given that in the future revenues will be sufficient to meet the costs of financing these projects.

63. This view is understandable, and there are a few prominent examples of well-functioning development banks — in Korea, Malaysia, Brazil, Turkey, and South Africa — that demonstrate that under a proper framework these institutions can indeed be instrumental in providing finance to under-served sectors. However, the history of development banking is also littered with examples where these institutions were used as a non-transparent way to finance pet infrastructure projects, or to bypass fiscal limits, which ultimately required costly budget-funded bailouts as the projects financed by the development banks did not generate sufficient cash to pay back the creditors. It is critical that Mongolia quickly internalizes these lessons of the many failures and few successes.

64. In a natural resource context such as Mongolia’s, the decision to use the DBM for project financing needs to be governed by two factors. First, while in general public investments in infrastructure, education, and health, together with straight savings in foreign currency, are the best use of natural resource revenues, they need to be phased in a way so as to avoid Dutch disease effects from an investment boom.¹⁴ Public investments will over the medium to long-term increase the productive capacity of the economy and help to diversify economic activity away from the natural resource sector. However, in the short run if investments increase at a pace much higher than the absorptive capacity of the economy then this will result in inflation and an appreciation of the real exchange rate with its consequent negative macroeconomic effects. In Mongolia, as discussed in more detail below, this effect is clearly visible today with the soaring prices of construction materials as the construction sector is unable to expand capacity at a commensurate pace. An optimal strategy would therefore, be to spread the investments over time by limiting the growth in annual investment spending to avoid such over-heating of the economy, which is precisely the logic of the expenditure growth rule of the FSL.¹⁵

Figure 17: Alternative forms of infrastructure financing have been increasing in prominence



Source: Bank staff estimates using MoF and DBM data

13 Cited in Gutierrez et al (2011).

14 Sachs (2007), IMF (2012).

15 The DBM is currently only covered under the debt rule of the FSL.

65. Second, these alternative forms of financing are sensible only if the projects undertaken generate a sufficiently positive cash flow to justify the higher cost of capital as compared to budget funding. The DBM's current portfolio of roads connecting the aimags, which are generally non-toll roads, and mortgage loans to low income households, will never generate sufficient funds to recover the borrowing costs. Therefore, these projects should be funded from tax revenues in the state budget and not from more expensive borrowing from international capital markets which will eventually require to be repaid from the budget.

66. In addition to these concerns about macro-economic sustainability, there is a big risk of political interference in the choice of projects that the DBM finances which would compromise the quality of these projects. The main problem is that the DBM's legal framework presently has several weaknesses that need to be urgently addressed. These include:

- Insufficient clarity on the mandate: Article 8.1 of the Law sets the mandate of the DBM as to finance large-scale development projects and programs approved by the parliament, with Article 10.1.3 elaborating that these projects should enhance economic growth and be oriented towards value-added goods. The mandate makes no explicit reference to cost recovery, implying that the DBM can fund projects that should ideally be funded through tax revenues. The mandate is also not clearly articulated, leaving a wide range of activities for the DBM. There is also no mention of funding being complementary to that of the private sector, which creates the possibility of the DBM crowding out private sector funding and eventually hindering the development of the private sector.
- An imbalance in the authority of the parliament vis-a-vis the DBM board on the choice of projects to finance: Article 8.1 of the Law states that the DBM must finance projects approved by the parliament, and that this list will be approved by the

parliament annually in its spring session. This requirement compromises the independence of the DBM. While the Government, as shareholder, can certainly establish priorities for DBM lending, specific projects should be technically evaluated by the DBM and approved by either its management or the board of directors. Certainly the Government needs to make the decision on whether or not to issue a guarantee on a project; but the ideal sequencing should be that the DBM should prepare a list of potential projects based on their feasibility and the Government can then decide which of these it will guarantee, rather than the Government or parliament approving a list of projects and then asking the DBM to finance them.

- Lack of clarity on who is the shareholder: Article 16.2 states that the Government of Mongolia will be the shareholder of the DBM. This is a vague specification as international experience dictates that it is important that the government designate a shareholders representative — a specific individual (e.g. Minister of Finance) or ministry/agency — to exercise its shareholder rights to prevent multiple ministries conveying potentially contradictory messages. For example, decisions on the DBM are currently being made by the Cabinet which compromises its independence.
- Lack of sufficient independence of the board from the government: Article 17 states that the board will be selected and dismissed by the Government, and independent members will be in a minority (3 of 9). Article 22.1.10 further specifies that board members can be appointed for a period "up to 3 years" and that the Government has authority to dismiss a board member prior to the completion of his/her turn. In order to preserve independence, the more successful development banks provide stronger tenure protections, with board members appointed for a fixed tenure, ideally with the tenure not coinciding with the electoral cycle, and with a due process specified for their termination. Serving

government officials should ideally also be a minority in the board. However, it is often recommended that the Ministry of Finance has a strong presence in the board to minimize fiscal risks. This presence of the MoF is particularly recommended for the DBM given the huge increases in capital expenditures going forward and the particular risks associated with mineral price volatility.

Article 22.1.5 allows the government to “have a direct contact with the bank and other authorities regarding credit policy of the Development Bank and its implementation, and express its stand”. This potentially opens the DBM to political interference, and is contrary to the stated principle in Article 6.1.2 of independence for the DBM.

- Lack of a clear supervision function: Good practice in the regulation and supervision of development banks requires the state to separate its ownership and supervisory roles. The supervisory function should aim to protect the state against credit risk and the private sector from unfair competition, and to ensure that the institution is transparent, and undertakes sufficient risk management, monitoring, and evaluation of its projects. The supervisor should have the appropriate legal capacity to take remedial action when the institution fails to meet requirements. The Law on the DBM does not clearly specify the role of the supervisor. The MoF has oversight responsibilities on the issuance of loan guarantees, and the DBM is required to provide the Bank of Mongolia (the central bank) with financial reports. However, this falls far short of the necessary supervision function. Ideally, the DBM should be supervised by the Bank of Mongolia.
- Excessive authority to lend: Article 24 sets the maximum loan-to-equity ratio at 50:1, implying a capital ratio of 2 percent, and Article 13 allows the DBM to issue loan guarantees to third parties. These are very lax standards that can create undue fiscal risks for the Government. Capital ratios

of between 12 percent and 30 percent are more common among the better-performing development banks.

Weak regulatory framework for PPPs

67. More generally, public-private partnerships (PPPs) are likely to be increasingly used to finance and execute infrastructure projects in Mongolia. The legal framework for PPPs, which is set out partly in the Law on Concessions (2010) and partly in the IBL, is quite weak. The Concessions law adopts the term “concessions” rather than PPPs, though the IBL uses the term PPPs. This difference is significant in that the emphasis in the Concessions law is on providing business opportunities to the private sector rather than protecting the government from fiscal risk. Some of the categories of concession included in the law, in particular the BT schemes discussed above, involve very little transfer of risk from the government to the private sector partner, and should not be allowed.

68. The IBL, and related recent amendments to the Concessions law, have addressed some of the more glaring weaknesses in the regulatory framework. For example, the Concessions law used to give a prominent role to the State Property Commission (SPC) in carrying out the feasibility studies of PPP projects, and in implementing approved projects, thereby creating a separate process than that for budget funded projects. This provision has now been changed under the IBL, which gives the planning agency (formerly the National Development and Innovation Committee (NDIC) and now the Ministry of Economic Development (MED)) the responsibility for conducting feasibility studies for large projects that can be potentially financed from various sources, including PPPs. The PPP unit in the SPC has now been transferred to the MED which should help in ensuring that the planning and appraisal of potential PPP projects is integrated with the planning and appraisal for budget funded projects. The mandate of the MED could potentially also be extended to cover the marketing and promotion of the PPP concept; preparing and disseminating PPP

guidelines; and developing the methodology for PFS and VFM tests. Under the IBL, the MoF has now been correctly given the sole authority on evaluating fiscal risks of PPPs and issuing guarantees, again addressing a major weakness in the Concessions Law. Given Mongolia's circumstances, some further safeguards to reduce fiscal risks could be introduced, which are discussed in the next chapter.

POORLY PREPARED PROJECTS

69. A major problem in Mongolia is that most projects that enter the budget are poorly prepared. They have inaccurate cost estimations that require frequent additional financing in supplementary budgets; there is little justification of the projects based on national and sectoral priorities; the future maintenance costs of the projects are not calculated; and members of parliament insert a number of projects during the budget debate session that have even more inaccurate cost estimations.

Limited project appraisal

70. Until the passage of the IBL, there was no legal requirement for the economic appraisal of projects prior to their inclusion in the budget. The Public Sector Finance and Management Law of 2003, which was Mongolia's primary budget legislation until the passage of the Integrated Budget Law in December 2011, was largely silent on the modalities for public investment planning and budgeting, and the MoF regulations on preparation and prioritization of public investment projects were skeletal. There were no project appraisal guidelines that specified what economic and financial analysis needed to accompany project proposals, and what would be the basis of appraising these projects. Without such systematic approaches, it was very difficult to determine inter-sectoral and intra-sectoral priorities, and to determine which projects are feasible and which are not.

71. The corollary to this regulatory weakness is the lack of capacity in the line ministries to conduct economic analysis, and the lack of

capacity in the MoF for an independent review of project proposals based on analytical criteria.¹⁶ The Investment Division of the MoF, which had prime responsibility for this task until recently saw a modest increase in staff from 6 to 7 officials over the past 8 years, a period in which the capital budget increased fourteen-fold. This gross lack of expertise has meant that for all practical purposes the project review process is limited to ensuring that the proposals for new constructions have the necessary technical drawings to comply with the requirements of the Construction Law, and that the cost estimates follow the required norms.

72. The NDIC was created in 2009 to build much needed capacity in strategic planning and project appraisal at the center of government. The parliament had repeatedly rejected the option of expanding the planning function within the MoF through, for example, the creation of a separate planning department with additional staff, presumably concerned that a more powerful MoF would undermine its own authority. The NDIC was therefore a politically more acceptable option and has a vital role to play to ensure that there is a comprehensive medium-term strategy for economic and social development — including the Southern Gobi mines — that takes into account the considerable inter-sectoral coordination required, the adherence to environmental and social safeguards, and the various options for infrastructure financing. The NDIC was in 2012 elevated to the MED to give the planning function greater authority.

73. The IBL greatly strengthens the legal framework for capital budgeting and specifies the precise roles of the MED and the MoF. Articles 28 and 29 of the Law require that only projects that have gone through a proper appraisal process would be considered for financing, with the appraisal methodology to be specified in guidelines. It then details two distinct processes, one for large (greater than 30 billion MNT) and another for small projects. For large projects, line ministries submit their proposals to the MED that then reviews these

¹⁶ See Rajaram et al (2010) for the framework for key aspects of a good public investment management system.

proposals to determine whether or not the project could be potentially financed based on government priorities, the medium-term fiscal framework, economic return, and inter-regional equity considerations (Articles 28.3.1 to 28.3.10). Projects that pass this pre-feasibility (PFS) stage enter a rolling four-year Public Investment Program (PIP) as a stock of potentially financeable projects. The Cabinet approves the PIP annually, with the MoF then responsible for all financing decisions — whether to fund projects from the budget, loans, concessions, or potentially the Development Bank of Mongolia. For small projects (less than 30 billion MNT), line ministries submit their proposals directly to the MoF, which is then responsible for the review process.

74. Why does the IBL split this responsibility for project appraisal between the MED and the MoF? It does so for two reasons. First, neither the MoF nor the MED have enough capacity on their own to handle the huge task of ensuring that good quality projects are prepared. By focusing on large projects, the MED can devote more time to ensuring that the overall project makes sense before significant budget resources are committed in the full feasibility study and engineering design (Box 2). Smaller, less complex projects do not require this degree of analysis and can be handled by the MoF. This distinction between large and small projects is necessary as project appraisal is a complex activity and Mongolia has limited technical expertise, and therefore it is necessary to initially focus this limited technical expertise on the larger projects.

75. Second, it ensures that the MoF retains responsibility for the overall financing decisions of all projects, large and small, and can discuss with line ministries their overall priorities taking into account the capital and recurrent budgets in an integrated manner. Sound budgeting requires that the capital and recurrent budgets be considered in an integrated manner by proposing line ministries to achieve policy objectives. For example, improving student learning outcomes in a particular aimag can be achieved through

a new or improved school building or more teachers and educational materials. Should the government build a new road in a particular area or spend more on maintaining existing infrastructure? Such comprehensive decision-making taking into consideration both the capital and recurrent budgets is difficult to achieve if two separate organizations are responsible for preparing the capital and recurrent budgets (a “dual budget”). It may for example, result in investment projects being built that do not have adequate maintenance funding budgeted for the future.

76. The IBL also improves the comprehensiveness of the budget. Currently, Mongolia’s capital budget does not include projects funded by foreign loans and grants, and only indicates a lump sum allocation for projects financed by local government own source revenues. The IBL will now require that the capital budget include projects from these other financing sources, thereby increasing its comprehensiveness.

77. Effective implementation of these provisions in the IBL are conditional on good coordination between line ministries, the MED, and the MoF, and calibrating project appraisal methodologies with the human resource capacity in these agencies. Recent developments raise the risk that the Government will create a dual budget thereby resulting in policy fragmentation.

Poor coordination between the Ministry of Finance and the Ministry of Economic Development

78. To date, coordination between the planning agency and the MoF has been poor. Until the passage of the IBL, there was considerable confusion about the precise roles of the NDIC and the MoF, with for example both the NDIC and MoF issuing circulars in 2010 and 2011 to line ministries to submit their capital project proposals to them with the result that line ministries were undertaking two separate processes, one for the NDIC and one for the MoF. This confusion persisted even after the passage of the IBL, with the NDIC seeking proposals from line ministries for all projects for its review and for eventual inclusion in the PIP.

Box 2: Stages of project appraisal for large, complex projects

Pre-feasibility

The objective of the pre-feasibility study (PFS) is judge whether or not the project proposal is good enough to merit additional resources for a full feasibility study. It is key stage for (a) screening out clearly bad projects before major design costs are incurred or political commitments made, (b) for reviewing the major design elements in a project (technology, scale, timing, location, organization, ownership) and (c) for identifying what additional information is required for the subsequent feasibility stage.

Feasibility

This is the detailed analysis of projects that survive the first stage of screening. Added surveys, studies, testing should be conducted to reduce the uncertainty in key factors determining the viability of the project.

Engineering design

The detailed design of the project consisting of the engineering specifications and construction designs, and plans for procurement and implementation. These become the basis for final budgets and the contract.

Source: Glenday and Kaiser (2012)

79. With the elevation of the NDIC into the MED the Government has also, as per the Law on Government Structure (2012), given the responsibility for evaluating all projects to the MED, in effect creating a dual budget. This move is a mistake for the reasons noted above: MED will not have sufficient capacity to properly evaluate the over a thousand project proposals that it will receive each year from line ministries, with the result that project preparation will continue to be poor. And splitting organizational responsibility between the MED and MoF for the capital and recurrent budgets will make it difficult to achieve overall policy objectives. A classic example of this policy fragmentation, and one which is found repeatedly in many countries, is new capital investments with insufficient programming for maintenance needs.

Extensive insertions of projects by parliament

80. Another problem has been the extensive powers of parliament to amend the budget which generally has resulted in weakening the public investment portfolio. Parliament has regularly significantly increased and altered the capital budgets submitted by the executive

— for example, in 2008 parliament increased the number of new projects by 60 percent and the annual capital budget by 25 percent, an intervention that is unusually high by both developing and OECD country standards (Table 2). The schemes proposed by parliament are generally small and geographically targeted; the average cost of a project over its lifetime was 1.5 billion MNT in the final budget approved by parliament as compared to 2.2 billion MNT in the budget proposed by Cabinet. These schemes are generally less well prepared than line ministry schemes, and often lack even basic documentation such as technical drawings and cost estimates based on the established normatives. An audit of the 2011 capital budget by the Mongolian National Audit Office (MNAO) identified a number of projects that were approved before the technical drawings were prepared, thereby violating the Construction Law. Some of these new projects flow from the Local Development Fund, or the allocation given to each parliamentarian for earmarked or “pork-barrel” spending in their home districts. These constituency funds were introduced in 2003, and the annual allocation per MP has increased hundred-fold since then from 10

million MNT per MP in 2003 to 1 billion MNT per MP in 2010. The Local Development Fund amounted to approximately 15% of the capital budget in 2010. However, the total number of constituency-specific projects is much larger,

as many projects proposed by line ministries also have this feature. As noted above, 66% of projects are small and often geographically targeted, a more accurate measure of the scale of constituency-specific schemes.

Table 2: The Mongolian parliament significantly changes the capital budget, as for example in 2008

	Number of capital projects	Budgeted cost (Millions of MNT)	Allocation for the fiscal year (Millions of MNT)	Cost per project (Millions of MNT)
<i>Approved by Cabinet</i>	479	1,043,617	456,058	2,178
<i>Passed by Parliament</i>	757	1,139,953	571,338	1,505

Source: Bank staff calculations based on MoF data

PROBLEMS IN PUBLIC PROCUREMENT AND CONTRACT IMPLEMENTATION

81. Public procurement is usually the most vulnerable part of the public investment system as procurement requires government officials to exercise discretion and make decisions over large sums of money at specific points which provides opportunities for influence from “interested” parties. These problems are particularly evident in Mongolia given the small size of the formal sector, the large overlap between political and construction industry circles, and considerable anecdotal evidence of political influence in the award of government contracts. Mongolia also features the usual technical problems of poor procurement planning, limited human resources in public procurement, which combined with the political interference result in a low value for money of infrastructure projects as measured by time and cost over-runs.

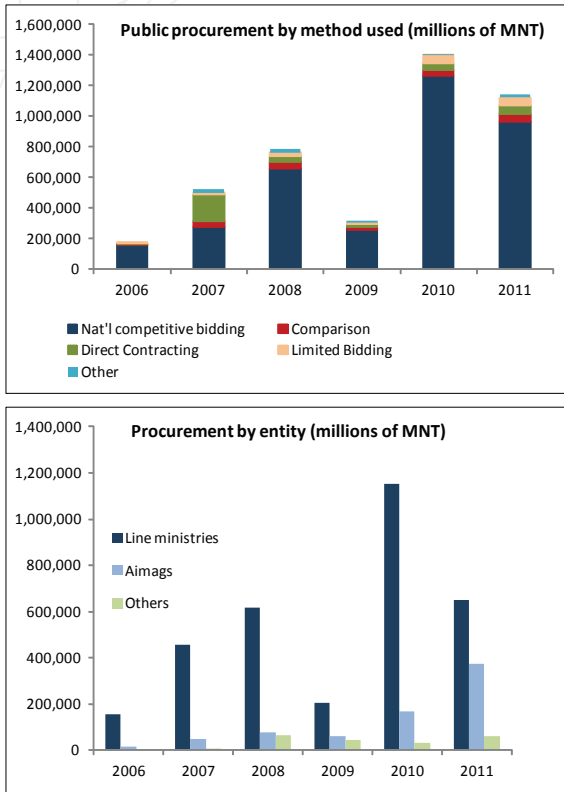
Capacity constraints

82. The rapid growth in capital expenditures has naturally meant that the scale of public procurement has also greatly expanded, increasing seven-fold since 2006 (Figure 18). This increase has greatly stretched the already thin capacity of line ministries, which have been responsible for the bulk of public procurement, as well as local governments. With the changes

brought about by the IBL and the revised PPLM, the scale of local government procurement will greatly expand going forward, while that of the ministries will decrease and be taken over by the new central procurement agency. These changes to the public procurement system will add to the challenge as capacity in the central procurement agency and local governments will need to be scaled up quickly to keep pace with ever-increasing state expenditures.

83. Mongolia has very few specialized procurement staff and most public officials in line ministries take on procurement responsibility in addition to their regular tasks. There are no specialized procurement units in any of the procuring entities that can provide the necessary expertise in preparing bidding documents. The result of this shortage of specialists is that regular administrative staff, particularly relatively senior officials such as Director Generals and Directors, spend an inordinate amount of time from January to April in the tendering process (the figure of “over 50 percent” was regularly mentioned in discussions). This represents a significant opportunity cost vis-a-vis other responsibilities, such as policy-making and monitoring.

Figure 18: Public procurement has increased seven-fold since 2006



Source: MoF data

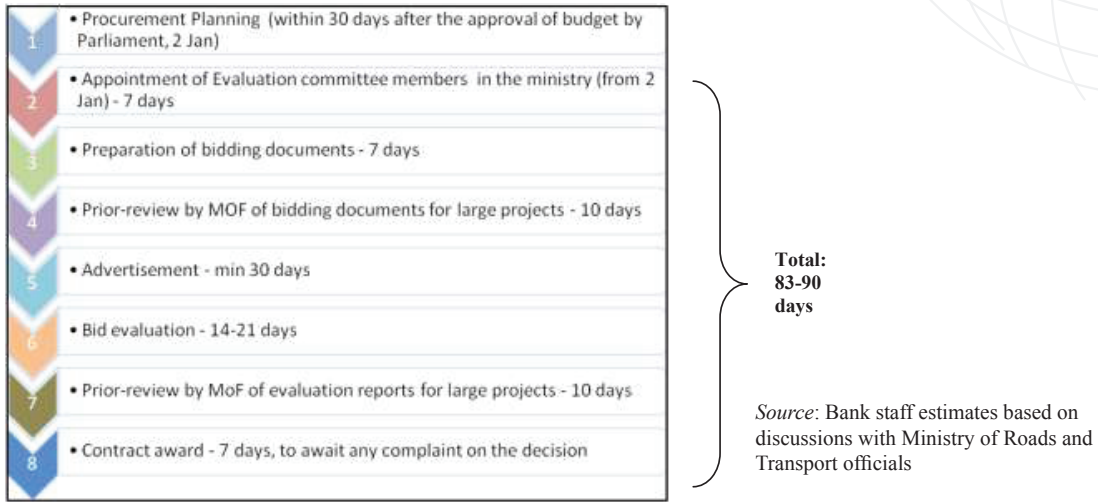
84. Mongolia's short construction season - from April to October - makes timely contract award extremely important. Prior to the June 2011 amendments, procuring entities were required to have their procurement plans approved by the MoF by the first week of January, one month after the parliamentary approval of the budget. This left a very short window of three months to complete the various stages of the procurement cycle so that construction could commence in April. Based on discussions with Ministry of Roads and Transport officials, on average the tendering process for roads projects takes about three months, creating a significant probability that projects would be delayed by at least 6 months to the next construction cycle (Figure 19). The June 2011 amendment seeks to address this problem by requiring the procurement plans to be finalized together with the budget, thereby giving procuring entities an additional month to conclude a contract.

Weaknesses in procurement planning

85. Poor cost estimation is the biggest problem in procurement planning. The reasons for this problem are both institutional and the general overheating of the economy that is resulting in rapidly rising prices of materials and other inputs to construction. On the latter, the unit cost norms used by the Department of Roads for budget planning have doubled over the past two to three years (Figure 20), but lack of adequate real-time data, and limited technical staff, has meant that these norms get out of date quite quickly and do not provide an accurate picture of the actual costs of construction. On the former, politicization of the budget planning process has generally meant that project costs based on these technical norms prepared by the Department of Roads are revised downwards by line ministry decision-makers so that more projects can be included within the line ministry's overall resource envelope. Therefore, the final project cost amount approved in the budget is at times substantially lower than what was proposed by the technical staff in the ministry. The general opinion of technical staff in the Department of Roads is that the budgeted unit cost of road construction (cost per kilometer) is unrealistically low in Mongolia resulting in substandard quality.

86. This problem of unrealistic costs is then exacerbated in the tendering process where the default position of the evaluation committee is to award the contract to the lowest bidder, and not the lowest *technically qualified* bidder. This tendency encourages bidders to submit unrealistically low bids, and then to seek adjustments during contract implementation, resulting in time and cost over-runs that are detailed below.

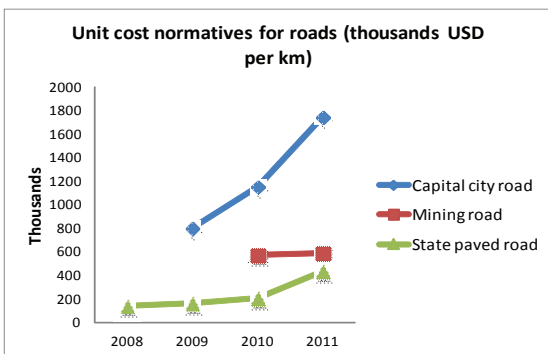
Figure 19: Average time taken at each stage of the procurement cycle



Lack of transparency and political interference

87. Weaknesses in the legal framework for procurement also raise questions on the quality of capital budget execution. As the Government’s recent audit report details, the major problem in this framework is the provision for direct contracting that was introduced in 2007 in the roads and energy sector. In 2007, 174 billion MNT, or 43 percent of all of contracts, were awarded through direct contracting (Figure 18), often with no accompanying technical documentation with allegedly numerous technically unqualified, and politically well connected, companies winning construction contracts (Government of Mongolia, 2008). Many road construction projects were also broken down into smaller schemes to enable smaller and less qualified companies to be directly awarded the contract.

Figure 20: Increasing costs of road construction



Source: Department of Roads

88. This practice of large-scale direct contracting was greatly reduced in subsequent, and is now prohibited, except in the case of special items such as pharmaceuticals, in the revised PPLM that goes into effect in October 2012. However, the government began to directly award contracts to consortia, or groupings of road construction companies, created in 2011 to address capacity limitations in the road sector (more on this below), although the implementation of this was delayed due to difficulties in forming the consortia. Importantly, the DBM is not subject to the PPLM and parliamentary resolution of 2011 listed 27 national and city road projects, at a cost of approximately 700 billion MNT, to be financed by the DBM using direct contracting over the 2011-2013 period.

89. Political influence in the award of contracts is repeatedly mentioned as a significant problem. This is most clearly evident in the extensive use of direct contracting in 2007, and is also the motivation behind the raising of the threshold for international competitive bidding from 1 billion MNT to 10 billion MNT in the June 2011 amendment to the PPLM. A review of the sample projects showed that all of the directly awarded contracts incurred significant time overruns — more than double the estimated completion time in some cases, and the quality of projects suffered considerably.¹⁷ It is also evident from

¹⁷ World Bank (2010b).

the close connections between members of parliament and construction companies. According to publicly available information, 8 percent of the members in the Parliament own shares in construction companies, with the top 10 local construction companies, which combined received 30 percent of the road construction contracts in the past five years, all owned by either members of parliament or individuals with close ties to the Mongolian Peoples Party or the Democratic Party.

Poor monitoring

90. Line agencies are responsible for day-to-day monitoring of contract execution, but are not well organized to perform this function. In the roads sector, the Department of Roads is the responsible unit and dedicates a team of 2-3 engineers per project for large projects to be located at the project site. The Department's budget only covers the supervisors' salaries and allowances, and they have to depend on the contractors for on-site accommodation and transport, which creates a conflict of interest. The Department acknowledged that many of these engineers are easily influenced by the construction companies and that therefore, there was a need for an independent monitoring agency.

91. This need has now been authorized in a parliamentary resolution and starting in 2012 consulting companies will be contracted to carry out monitoring of road and bridge construction. However, ensuring that these supervisors are truly independent is a challenge in a small country like Mongolia. One option is to partner these supervision engineers with civil society organizations to maintain checks and balances and to complement competencies. The engineers would bring the necessary technical skills of contract monitoring; the CSOs would facilitate community feedback, and publicize the results through media and other channels.

The reforms underway

92. The Government, through the 2011 revisions to the PPLM, has recognized the need for a major

overhaul of the public procurement systems to address these problems. The most significant changes introduced are:

- Transferring the procurement function from line ministries to both local governments and a new central procurement agency (CPA);
- A new role for civil society organizations (CSOs) in procurement monitoring;
- The creation of a new Procurement Inspectorate to ensure compliance with the law during the bidding and bid evaluation stage.

93. The Central Procurement Agency (CPA) will be responsible for the procurement of all large, national contracts to be financed from the central government budget, as well as for establishing framework agreements for common use items (such as office supplies) that will then be purchased by line ministries. It will be responsible for all procurement activities up to the award of a contract, with line ministries then taking over on contract implementation and monitoring. The agency was established in October 2012, under the office of the Deputy Prime Minister.

94. The stated rationale for the creation of the CPA is to both increase procurement capacity and to increase transparency and reduce the risks of corruption. The aim is to establish an entity that specializes in procurement and which would be staffed by professionals dedicated full time to this purpose, as opposed to the current arrangements where regular officials from line ministries conduct procurement in addition to their normal duties. This separation of the procurement function from line ministries is also meant to allow the latter to focus on their main responsibilities of policy-making, planning, implementation and monitoring. It is also anticipated that this centralization will improve transparency as it will be easier to place controls on, and to monitor, the procurement activities of one central entity, through for example the limited resources of the MNAO as compared to several line ministries, in particular with the roll-out of e-procurement.

95. The government chose not to pursue the option of creating specialized procurement units in line ministries to address the present deficiencies and there is little in the way of rigorous cross-national empirical evidence as to which institutional arrangement — centralized with a specialized entity or decentralized with line ministries — is better in terms of efficiency and transparency.¹⁸ It does seem to be the case that in the Mongolian political economy context it is easier to create a new agency than to increase staff numbers in an existing ministry as the latter can result in a potential imbalance in the influence of the various political factions that control the different ministries. An example of this was the debate that took place three years ago on whether or not strengthen the planning function in the MoF or to create a separate planning agency, with the latter option proving to be politically more feasible for precisely these reasons.

96. In sum therefore, it may only be possible to address this urgent need to increase the transparency and capacity of public procurement in Mongolia through the creation of a separate specialized agency. The move does appear to have broad support; for example all the state secretaries of the line ministries unanimously endorsed the option when it was under discussion in parliament, stating that procurement activities were seriously distracting them from their prime responsibilities of policy-making and service delivery.

97. The authority given to CSOs in the PPLM is very extensive when compared to similar pieces of legislation in other countries, and if effectively implemented will make Mongolia quite unique in institutionalizing citizen oversight over public procurement. This change is in keeping with a trend seen in many countries over the past several years for a greater push for transparency and CSO oversight of public expenditures. The rise and spread of international transparency initiatives (including Construction Sector

Transparency Initiative, the International Budget Partnership, EITI) and third party monitoring of service delivery (e.g. Road Watch in the Philippines and Twaweza in East Africa) are examples of the growing movement to monitor and demand greater accountability for public expenditures. The rationale for these initiatives is that citizens have greater incentives to ensure that contracts are implemented correctly as they are the ones who benefit the most from the construction of a school, well, health clinic and the delivery of school desks, textbooks and medicine. Often, community members can monitor procurement projects more effectively than government structures since they are physically closer to them than government agents. In some contexts, communities can use locally embedded, social sanctioning mechanisms to demand better performance from local workers and government officials.¹⁹

98. In order to effectively monitor procurement performance however, communities need to overcome obstacles that often inhibit collective action, including poverty, inequality and social divisions (e.g. ethnic and religious divisions).²⁰ Procurement monitoring of large infrastructure projects, such as power grids, highways, and dams, also requires an understanding of the technical specifications of the procured item, a skill that is often in short supply even in OECD countries. Moreover, in a small country such as Mongolia, CSOs can also be subject to similar problems of conflict of interest and collusion that besets the private sector.

99. In short, for CSO monitoring to be effective these organizations have to be free from undue political influence, have sufficient capacity to monitor procurement and contract implementation, engage in a constructive manner with the government, and be able to generate sufficient action on its findings, from the government and the broader public. The next chapter provides some recommendations on the effective implementation of this key reform initiative.

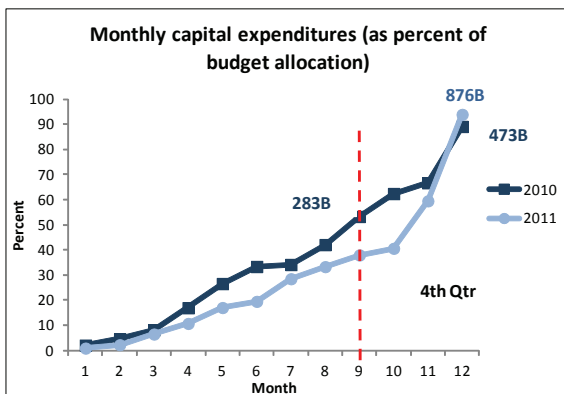
¹⁸ There are many cases of successes and failures of central procurement agencies. The good examples are unsurprisingly in countries that are generally well governed, such as Korea and Chile, while the bad ones are in some of the sub-Saharan African countries. With the current state of knowledge it is impossible to conclude whether the organizational form of the procurement function matters independently of the broader institutional context of the country.

¹⁹ Ostrom (1990), Tsai (2007), Booth (2010).
²⁰ Devarajan et. al (2011).

INFLEXIBILITIES IN BUDGET EXECUTION

100. Given these problems, actual budget utilization of the capital budget is surprisingly high, approaching 90 percent over the past five years. As Figure 21 shows, however, between 50 to 60 percent of the expenditures occurred in the fourth quarter for 2010 and 2011, with approximately 30 percent occurring in December alone. Seasonality is part of the reason for this skewed disbursement pattern. Given that the construction season is from April to October, some of these fourth quarter expenditures are likely to be payments for the works completed by October. Line ministries also have an incentive to disburse since the capital budget is annually appropriated and any unspent funds are re-appropriated by the MoF at the end of the fiscal year. While on paper there are strict guidelines for payments, involving certification by both the sector Ministry and the General Specialized Inspection Agency, it has been suggested that this expenditure in the fourth quarter may not represent actual project implementation. The Investment Division, which authorizes the payments, does not have a good picture of the status of implementation of projects, and is unable to provide any checks.

Figure 21: Disbursements from the capital budget are highly skewed with half being done in the last quarter



Source: MoF data

101. This point is made strongly in the MNAO audit reports, which noted that in 2007 disbursements of 115 billion MNT were made

to vendors for projects managed by the Ministry of Fuel and Energy despite a majority of the contracts not being completed as per schedule.²¹ In other words, payments are made before the end of the fiscal year for work to be performed in the following year, which undermines quality controls. A parliamentary resolution of 2011 has formalized this de facto bad practice, by authorizing advance payments as long as the contractor is able to demonstrate the presence of construction materials, such as cement, steel, and stones, on the construction site. This resolution was rightly criticized in the MNAO audit report.²²

102. The shortness of Mongolia’s construction season, and the difficulty in accurately anticipating the costs of construction materials during budget preparation call for the need for greater flexibility in budget execution. The two usual methods are multi-year appropriations and carry-over funding for multi-year projects; and greater authority for implementing agencies for changing the approved line item appropriations by switching the budgetary provision from slow-moving to fast moving projects (virements).

103. On the former, the IBL introduces the provision of carry-over funding — i.e. the authorization to spend unused appropriations, together with next year’s appropriation, in the next fiscal year — for multi-year capital projects that should help reduce this pressure for disbursement. Specifically, the law allows for a maximum of 3 percent of the line ministries total capital budget to be carried over for multi-year projects for a period of up to three months.

104. While this provision rightly addresses the multi-year character of capital projects by providing some flexibility in payments over time, it does not go far enough. Given the short duration of Mongolia’s construction season, a three-month carry-over may reduce some of the end-year pressure to disburse, but will not provide sufficient time to pay for additional work since the next construction season only commences in May. Therefore, greater flexibility is warranted.

²¹ Government of Mongolia (2008).
²² Government of Mongolia (2012)

105. Until recently the parliament appropriated the capital budget project by project with no authority for line ministries or the MoF for virements between projects without parliamentary approval. The IBL has significantly increased flexibility by giving line ministries authority to enable virements between projects within their portfolio with the sensible restriction that budget adjustments cannot be made between capital and recurrent expenditures and that the adjustments cannot be used to finance new programs and activities that were not included in the budget.

106. An additional inefficiency in budget execution is the excessive involvement of the Investment Division of the MoF in authorizing payments for projects. Currently every payment for each project needs to be first authorized by the Investment Division before the payment can be made by the Treasury Department. Given that there are annually well over a thousand projects, each with between one and twelve payments annually (depending on the size of the project), approximately 50 percent of the Investment Division's staff time, by their own admittance, is spent in authorizing payments, detracting from the much more important task of project appraisal and budgeting.

CAPACITY LIMITATIONS IN THE CONSTRUCTION SECTOR

107. Improving government systems for planning, budgeting, procurement, contract implementation, and monitoring have to be matched with ensuring that there are no regulatory hurdles that prevent the growth of the construction industry to meet the rapidly growing demand, and addressing capacity constraints. The Mongolian roads construction industry is currently incapable of meeting the huge construction demands of the medium term plan. While the industry has been growing steadily, of the 186 registered road construction companies, only 59 are currently active, and of these 59 only 10 have the capacity to build roads above 50 km in length (Figure 22, left panel). While the companies are capable of

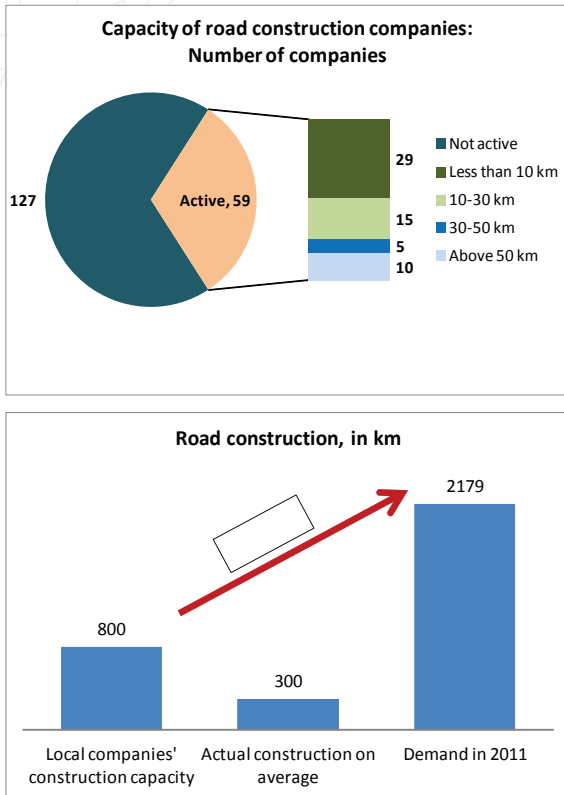
constructing roughly 800 km of roads annually, the construction demand in 2011 was three times as much, and actual construction has only averaged 300 km a year for the past three years (Figure 22, right panel). Similar bottlenecks are found upstream in the availability of cement, other raw materials, and equipment, as indicated by the rapid rise in, for example, cement prices — the price of locally produced cement has tripled over the past five years.

108. Clearly, some drastic changes need to take place in the sector if Mongolia is to achieve its ambitious infrastructure plans, which includes a recognition that foreign companies will have to play a major role in ameliorating these bottlenecks. Below we briefly explore some of the main constraints that impede the growth of the construction sector.

Restrictions on immigration

109. Restrictions on the hiring of foreign workers are the main regulatory constraint to the construction sector. Due to the labor force shortage —approximately 500 engineers and 5,000 skilled laborers are employed in the roads construction sector, about half of what is currently needed —it is essential for companies to obtain laborers and specialists from abroad. However, the Labor Law requires a specific quota to be kept between the number of local and foreign workers. The law also requires a high premium (monthly fees) per foreign worker which approximately equals the average salary of a local construction worker. These restrictions are particularly difficult for smaller companies. There is also ample evidence that the law is not being implemented in practice, as there is a big gap between the officially registered foreign workers and the actual number of foreign workers suggesting that many foreign workers are either illegally residing in Mongolia or are working under tourist visas. Even though the registered foreign workers have increased 15 fold from 105 in 2006 to 1586 workers in 2010, according to unofficial estimates there were about 4000 Chinese workers alone in 2010.

Figure 22: Capacity limitations in the roads construction sector



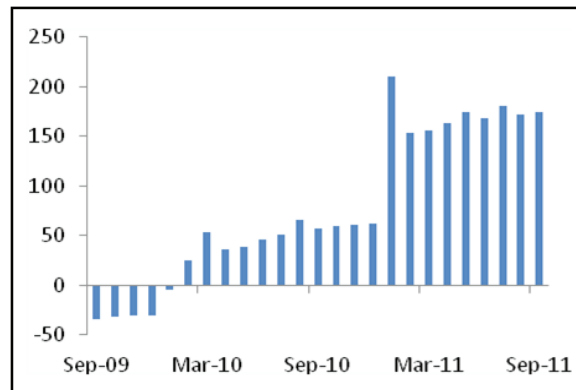
Source: Department of Roads

110. The time and steps involved in obtaining a work permit from the government is also a major issue. Although the law states 24 working days are required to receive government approval, the numerous steps listed below are often not completed until August/ September when the construction season is finished:

- Letter of reference from the Mongolian Immigration Agency to the Ministry of Social Welfare and Labor;
- Approval letter from the Ministry of Social Welfare and Labor to the Mongolian Immigration Agency;
- Visa approval letter from the Mongolian Immigration Agency to the Ministry of Foreign Affairs;
- An official invitation letter from the Ministry of Foreign Affairs to the Mongolian Consulate.

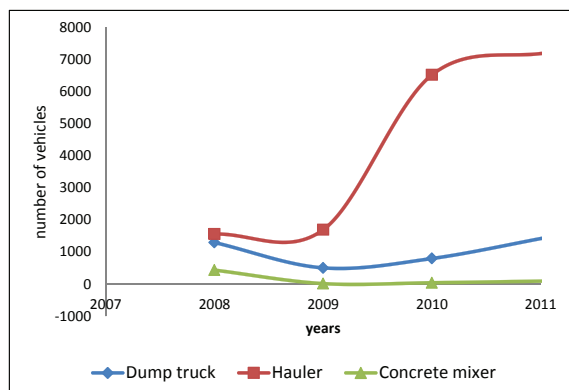
111. These immigration policies are particularly problematic for a labor-scarce, geographically vast, and natural resource rich country such as Mongolia. Skilled workers make up 20 percent of Mongolia's labor force of 1.1 million (NSO data), many of whom are being drawn into the booming mining sector. This is a familiar phenomenon in resource-rich countries where factors of production are drawn to the mining sector at the expense of other sectors; it is particularly pronounced for a labor-scarce country. As a result the construction sector faces severe skilled labor shortages. With the shortfalls in recertification and retraining, lack of standardized training opportunities for new workers and limited numbers of graduates each year, many of whom are pulled into the mining sector, these constraints are unlikely to be easily relaxed.

Figure 23: Machinery and equipment import (percent year-on-year change)



Source: National Statistical Office

Figure 24: Number of registered construction vehicles



Restrictions on the import of equipment

112. Equipment imports (new and used) from neighboring international markets including China, Japan, and Korea, and the number of registered construction vehicles have tripled over the last 3 years (Figure 23 and Figure 24). There are however, some restrictions in the Customs Law on the import of equipment that negatively impact the sector. Foreign companies are allowed a 1 year VAT exception, after which point the equipment is required to leave the country. Given that an average road construction project can take up to 3 years, foreign companies face significant time constraints if they wish to bring their equipment from overseas. The stated rationale for this policy is to prevent the domestic sale of this imported equipment. However, the concern regarding abuses by local companies needs to be weighed against the economic benefits and national impact, and should also focus towards providing incentives to equipment importers both for foreign and local companies.

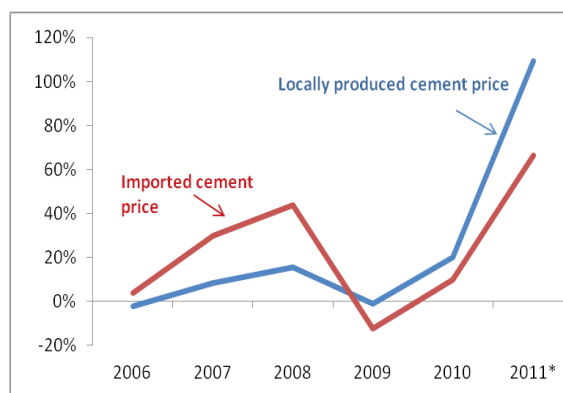
Bottlenecks in the supply of construction materials

113. The recent spike in the demand for roads, buildings, and infrastructure has resulted in a significant increase in the demand for building materials. Cement is one of the most basic construction materials, and an essential item for the infrastructure development of the country. Cement consumption in Mongolia increased more than tenfold in the past 10 years, with the total current cement consumption at approximately 1.5 million tons a year, with demand expected to triple in the next three years. Mongolia's own cement production has been unable to cope with the increased demand, and prices for locally produced cement have shot up since 2009 (Figure 25). Imports have only partially been able to off-set the price increase because Mongolia imports the bulk of its cement from China (unofficial estimate: about 90 percent), which itself struggles to meet local demand. Since the first quarter of 2011, beyond the sharply rising cement prices in Mongolia, these pressures resulted in a

widening gap between local and import prices, as imports were not able to meet local demand and local supply is not growing fast enough.

114. The price of cement, which is not regulated by the government, fluctuates dramatically during the course of the construction season, with the peak of the season in July. Each year, the demand becomes very constrained after a certain point in the summer. Due to border logistic issues with China, there are serious supply bottlenecks. Thus, for example, the price of cement soared from 65 USD per ton in January 2007 to more than 160 USD per ton in August 2010.

Figure 25: Increases in cement prices (percent year-on-year change)



Source: NSO

Non-competitive public procurement

115. Non-competitive procurement practices also hurt the growth of the construction industry. The June 2011 revisions to the PPLM raised the threshold for international competitive bidding from 1 billion MNT to 10 billion MNT (approx. \$8 million) which, while it will have limited ramifications for most foreign companies which generally tend to bid for large contracts above this threshold, is a move in the wrong direction. Similarly the extensive use of direct contracting also creates barriers to entry. The Government has been encouraging the formation of consortiums — 50 national road companies recently formed 5 consortiums — in order to meet national objectives and implement

large road construction projects, a move that also risks reducing competition. In part due to these non-competitive practices — both de jure and de facto in the form of the privileged access to contracts given to politically connected firms — as well as the above-mentioned capacity limitations, the average number of firms showing interest in road contracts, as measured by those purchasing bidding documents, and actually bidding for these contracts is very low,

ranging between 1-2 bidders for small and large roads, and 3-5 bidders for medium sized roads (Table 3). It should be noted that the low number of bidders for small roads is due to the fact that these are usually local roads which only companies from the particular region in which the road is located find economic to bid on, a fact that is likely to change with the increasing number of local construction contracts going forward.

Table 3: Limited competition for road construction contracts

Nature of contracts	Number of companies purchasing bidding documents	Number of companies submitting bids
Small sized contracts up to 10km paved road	1-2	1-2
Medium sized contracts 10 to 50 km paved road	3-7	3-5
Large sized contracts more than 50km paved road	1-3	1-2

Source: MORTCUD

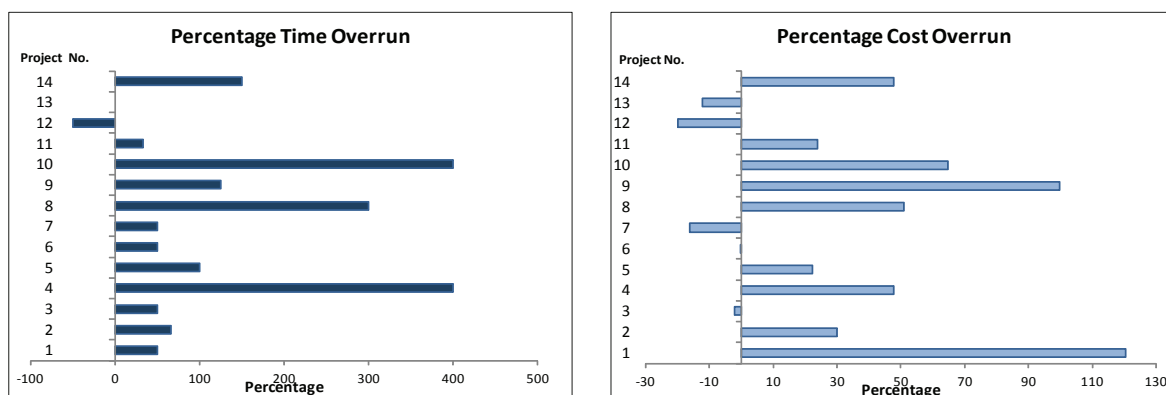
THE RESULT: LOW VALUE FOR MONEY

116. Weak budget and procurement planning, political interference, and poor project implementation all translate into low value for money of public investments. Time and cost overruns are ubiquitous; a sample of roads projects had an average time overrun of 120 percent and an average cost overrun of 35

percent (Figure 26). Of the 14 projects in the sample, all but 2 had time overruns, often doubling or tripling the actual completion time as compared to the original plan, and 9 had cost overruns.²³ Discussions with the Department of Roads confirmed that inadequate planning, poor cost estimations, limited budgets, and limited capacity of construction companies all contributed to these delays.

²³ The sample consisted of budget-funded, large national road projects completed, or expected to be completed, between 2007 and 2012. The sample excluded donor-funded projects, or contractor funded projects.

Figure 26: Time and cost overruns are a common occurrence (based on a sample of 14 national roads projects)



Source: Bank staff calculations based on MoF data

CHAPTER 3: POLICY RECOMMENDATIONS

119. Mongolia’s GDP growth rate is likely to be in the double digits over the medium to long term with the production from Oyu Tolgoi and Tavan Tolgoi, and the doubtless new mineral discoveries in the future. However, these impressive growth numbers, on their own, are deceptive given the special, enclave nature of mining with limited forward and backward linkages to other sectors of the economy, and low employment generation. One key aspect of linking mining production to broader-based economic growth and welfare improvement will be the effective use of the many-fold increase in government revenues over the next decade and beyond through public investments in infrastructure and human capital.

120. This is a critical time for Mongolia as research has shown that huge increases in natural resource revenues puts great strains on a country’s institutions, particularly if those institutions are already weak to begin with. Mongolia is very vulnerable to this institutional decay given the close overlays between political and business circles, linkages that explain many of the problems in public procurement and contract implementation as well as the extensive use of off-budget financing. It is imperative that these institutions of fiscal policy and public

investment management be strengthened now and that regulatory safeguards be put in place to prevent these new resource rents from being “captured” by relatively few privileged elites, or “oligarchs”, who could then become politically dominant thereby closing the window for reform for a long time.

121. There is considerable room for optimism about Mongolia. Many policy-makers are very well aware of this critical moment in Mongolia’s history, hence the recent passage of a string of good laws — the FSL, the IBL, and the PPLM. The technical solutions being proposed below are therefore, likely to resonate with many of the politicians; moreover, because of some of the favorable aspects of Mongolia’s political economy, in particular the presence of relatively coherent political parties that are able to achieve cooperative outcomes, these suggestions have a better chance of being implemented than in many other developing country contexts.

122. This chapter presents policy recommendations to address the problems identified in each of the four key areas. A summary of the recommendations, and a suggested prioritization for implementation, is presented in the table below:

	Policy Recommendations	Priority
	Spending in the Right Areas	
1.	Greater proportion of budget infrastructure capital spending should be directed towards Ulaanbaatar and the growth poles. In the roads sector, priority should be given to Ulaanbaatar’s trunk and <i>ger</i> area roads, the international trade corridors, and the roads in the mining regions.	Immediate
2.	In the rural areas, the government should focus on low-cost spot improvements (e.g., construction of bridges or culverts, maintenance of natural tracks) on the main national and local unpaved roads to make these roads all-season, thereby improving connectivity for rural communities.	Immediate
3.	The Government should be annually spending five times as much as it currently does on road maintenance to cover routine maintenance needs and to clear the backlog of roads requiring rehabilitation. This would only require a 20 percent reallocation from new investments to maintenance and repair and can be easily achieved.	Immediate

Achieving the Balance between Infrastructure needs and Macro-fiscal Sustainability		
4.	The Government should have a clear policy that (a) that the DBM only funds revenue-generating projects; (b) if it is to fund socially beneficial projects then the amount of lending to such projects be reflected in the state budget and therefore be capped by the structural balance and expenditures rules of the FSL; and (c) that there are some limits on the aggregate lending of the DBM, through adequate capital adequacy ratios and MoF oversight, to prevent overheating of the economy and to ensure macroeconomic sustainability. Such a policy will require amendments to the Law of the Development Bank.	Immediate
5.	The government should discontinue “build-transfer” (BT) schemes in the roads and energy sectors as they increase the cost of projects and involve very little transfer of risk from the government to the private sector, and should instead finance such projects from the budget.	Immediate
6.	The government should consider imposing a cap on its aggregate exposure to fiscal risks through PPPs, perhaps initially at 2 percent of government revenues, a figure which could be increased as experience of implementing PPPs grows.	Medium-term
Strong Corporate Governance for the DBM		
7.	The Law on the Development Bank needs to be strengthened to reduce the risk of macroeconomic instability and poor quality of capital expenditures. This will require amendments to ensure clarity of mandate; a higher capital adequacy ratio; greater oversight by the MoF; independence for the board; supervision by the Bank of Mongolia; and performance contracts to balance accountability with independence.	Immediate
Strengthening Project Preparation		
8.	The Government should not create a dual budget with the MED and MoF responsible for preparing the capital and recurrent budgets respectively. Instead, the IBL provisions on planning and capital budgeting should be implemented with the MED responsible for reviewing large projects only. The Government however, could consider lowering the threshold for these large projects from 30 billion MNT.	Immediate
9.	The draft planning law needs to specify the consultative mechanisms, such as sectoral inter-ministerial groups, and a Southern Gobi Infrastructure Council, to mandate the collaborative process needed in developing the medium and long term planning documents and scenarios.	Medium-term
10.	The implementation of IBL provisions on project appraisal need to be calibrated to local capacity. The Government could start by focusing more on the cost side of cost-benefit analysis for most projects, with the more sophisticated full socio-economic cost-benefit analysis limited to large, complex projects.	Immediate
11.	Parliament proposed projects should be subjected to the same project appraisal process specified for line ministry projects in the IBL and supporting regulations. In terms of the budget cycle, this may imply that projects proposed during the parliamentary budget session, if they pass MED’s or MoF’s appraisal, could be considered for funding and inclusion in the capital budget for the following fiscal year. Alternatively, for projects to be included in the same fiscal year there needs to be a formal mechanism by which parliament can propose projects early during the budget preparation process.	Medium-term
Improving Budget Execution		
12.	The IBL should be amended to increase the carry-over funding provision for capital projects from three months to one year, while sticking to the 3 percent limit, to provide sufficient time for the completion of works while minimizing fiscal risks.	Medium-term
13.	The budget department of the MoF should not be authorizing payments for capital projects as this is a treasury function and it takes precious time away from the vital task of budget planning and project appraisal.	Medium-term
Greater Capacity, Transparency, and Oversight in Procurement and Project Implementation		
14.	In order to ensure transparency and adequate oversight over the Central Procurement Agency the Government should: establish an Oversight Council; use e-procurement; and for high profile contracts, use “probity advisors”, typically an international audit firm, on bid evaluation committees to both advise on technical issues and to be an independent observer to ensure transparency and robustness of the process.	Immediate

15.	In order to clarify roles and responsibilities between the CPA and line ministries, the line Ministry/ Implementing Agency should have the majority vote in respect of the technical issues during bid evaluation (either when it comes to voting on technical issues or by way of a separate technical evaluation sub-committee, whatever is most efficient). To provide a guarantee of probity, the CPA would be able to veto that technical decision whenever it considers the decision not to be genuine	Immediate
16.	Transition arrangements need to be in place as the CPA builds capacity to ensure that procurements are not delayed. It would be advisable for the CPA to begin slowly with some selective contracts to give it sufficient time; this provision however, would require an amendment to the PPLM.	Immediate
17.	It is recommended that the non-government participants on bid evaluation committees should be observers and not voting members, and should not comment on the technical evaluations but restrict their role to observing and commenting on the transparency of the process and compliance to rules and regulations.	Immediate
18.	There should be a standardized reporting template — an “observers report” — for bid observers. The template should include a space to include detailed comments. The reports should be submitted electronically and channeled to procuring entities and to the Ministry of Finance.	Immediate
19.	To be effective in contract monitoring, CSOs will likely need to partner with engineers or other technical specialists. The engineers would bring the necessary technical skills to the table, while the CSOs would help ensure that these engineers remain independent and that their technical assessments are effectively used for advocacy purposes to ensure transparency and accountability.	Medium-term
20.	A CSO network has an important role to play to ensure standards in CSO monitoring. This is particularly important given that CSOs can suffer from the same conflicts of interest as policy-makers. The network should be an umbrella organization with affiliates across Mongolia. In the short-term, the network should have very loose entry requirements: prior experience with monitoring government processes (e.g. EITI, budgets, and elections); compulsory training for affiliates; and, agreement to its Code of Ethics. The network should monitor its members’ participation in procurement monitoring and have the right to blacklist members for violating the network’s Code of Ethics or government regulations and laws.	Medium-term
21.	In the short run the World Bank and other donors can fund the CSO procurement network. The Government could also provide a budget line to the MoF to fund contract monitoring and bid evaluations. In the long run, an independent foundation can be established to fund different types of CSO activities, including procurement monitoring, which could be funded by the government, donors, and mining companies.	Immediate & Medium-term
Addressing Capacity Constraints		
22.	In order to combat the “brain drain” from the civil service, and to maintain its attraction for new recruits, the Government may need to be more flexible in its approach to civil service pay by moving beyond across-the-board salary increases and giving additional market-based salary premiums to staff working in jobs in high demand	Medium-term
23.	The Government can also learn from the experience of other labor scarce natural resource rich countries which relied extensively on importing both skilled and unskilled labor from overseas. Opening the borders to immigrants can plug the skills shortfall and produce knowledge spillovers that accelerate human capital formation. This would require relaxing some of the restrictions on migrant workers in the Labor Law	Medium-term

SPENDING IN THE RIGHT AREAS

123. The Government’s current and medium-term infrastructure spending priorities need to be reoriented to emphasize the growth poles, in particular Ulaanbaatar, and to focus on the maintenance of capital assets to move away from the current ‘build-neglect-rebuild’ syndrome.

60 percent of Ulaanbaatar’s population lives in peri-urban settlements — *ger* areas — that are not fully integrated into the city’s infrastructure, a problem that will get worse if not urgently addressed with the continuing migration into the city. Rather than discouraging migration to Ulaanbaatar and artificially creating alternative urban centers, as outlined in the national

medium term strategy, the Government needs to accept that this migration is driven by the forces of economic agglomeration that, if well managed, can encourage broader-based economic growth.

124. On new investments, World Bank (2010) emphasized a number of priority areas for investment in Ulaanbaatar that bear repeating: construction of access roads within ger areas; better heating systems to improve efficiency and reduce air pollution; investments in solid waste management and community infrastructure; affordable collective housing for mid-tier areas; and expansion of the city's electricity, heating, and water utilities. The ADB (2011) report on the roads sector recommended focusing new construction where demand is the highest: Ulaanbaatar's city trunk and feeder roads (e.g., in the ger areas), the international transit corridors, and roads serving mining areas.

125. This is not to deny that equity considerations are not important. In fact, as ADB (2011) points out, low cost improvements in rural transport connectivity are feasible given that Mongolia's terrain allows for relatively good driving conditions on natural tracks and gravel roads. These natural tracks can be made all-weather through a focused program of spot improvements that would entail the construction of some new bridges or culverts on the main national and local unpaved roads to make these roads all-season, and regular maintenance, thereby improving connectivity for rural communities while also laying the groundwork for their eventual paving.

126. The Government currently spends 15 billion MNT, or approximately \$11 million on routine maintenance of the roads sector, which amounts to 0.14 percent of GDP. The ADB roads study estimates that maintaining the current road network effectively requires roughly \$45 million annually (in 2012 prices).²⁴ An additional \$20 million over six years is required to clear the maintenance and rehabilitation backlog. Overall, therefore a five to six-fold increase in the current maintenance budget of annual

roads maintenance expenditures is needed to meet the needs of the sector. This increase to 75 to 90 billion MNT can be easily achieved given a modest reallocation from new investments to maintenance as it is only 20 to 30 percent of the 330 billion MNT earmarked in the 2012 capital budget for new road and bridge construction. Clearly this is a "low hanging fruit" that can show immediate results if the political will is there to implement it.

127. This budget reprioritization needs to be complemented by improvements in the investment climate to encourage private investments, particularly in Ulaanbaatar, in housing, utilities, and transport. To date, private investments in infrastructure have been limited, in large part due to regulatory, policy, and pricing constraints. There is the need for the introduction of independently regulated cost-recovery tariffs for electricity, water, and urban transport; improvements in the regulatory climate to encourage private participation; and improvement in land regulations to streamline the process of acquiring and fairly compensating for private land for infrastructure development.

ACHIEVING THE BALANCE BETWEEN INFRASTRUCTURE NEEDS AND MACRO-FISCAL STABILITY

128. Mongolia learned from the 2008-09 crisis and passed the Fiscal Stability Law (FSL) to smooth the effect of mineral price volatility, limit expenditure growth to avoid over-heating of the economy, and to ensure long-term fiscal solvency through caps on public debt. The experience so far in 2012 underscores the importance of strictly adhering to the FSL in 2013, when it becomes fully operational. Soaring government spending has been pushing up inflation, putting pressure on the balance of payments and requiring large domestic government borrowing, putting pressure on the banking system.

129. There are however, emerging risks that the FSL's implementation will be significantly compromised in letter and in spirit. Specifically, these risks are:

²⁴ The study estimated this at \$39 million for 2011, which has been adjusted for inflation for 2012

- Considerable off-budget financing from the Development Bank of Mongolia (DBM) for non-revenue generating projects that are not subject to the FSL limits but which will require future budget funding to repay DBM loans;
- “Build-transfer” (BT) projects in the roads and energy sectors that were financed by construction companies themselves on the condition of repayment from the budget at a later date;
- A weak legal framework for public-private partnerships (PPP).

Ensuring that the DBM is within the framework of the FSL

130. Infrastructure spending has to take place within a sensible macroeconomic framework that preserves short-term stability and long-term fiscal viability. Over-spending on capital expenditures, if spent well, poses less risk of over-heating of the economy and of appreciating the real exchange rate since it increases the productive potential of the economy. However, in a small open economy such as Mongolia’s, that is particularly vulnerable to commodity price shocks, with an under-developed construction sector, and public expenditure systems that have not been able to effectively handle the rapid scale-up in spending, it is imperative that investment spending growth is calibrated to both the absorptive capacity of the economy as well as the capacity of the government’s public investment management system

131. Sensible phasing of capital expenditures implies complying with the fiscal rules set out in the FSL for budget funded expenditures and placing adequate safeguards on alternative forms of financing, most notably from the DBM. The lending operations of the DBM are currently not covered under the structural balance or the expenditure rule of the FSL (DBM borrowings are covered under the debt rule). This implies that the logic of the FSL is undermined if the DBM is used as a source of off-budget financing. These risks are particularly high given both the scale

of DBM lending and the nature of the projects that the lending is going to. In 2012, the DBM committed \$600 million in lending to projects in roads, railways, utilities, cement production, low income urban housing, and mining. This \$600 million is equivalent to about half of the disbursement from the state capital budget. A number of these projects, in particular roads which makes up \$150 million of the loans and working capital for ETT of \$100 to \$300 million, will not generate revenues, and for which funding from the state budget will be needed to repay principal and interest.

132. It is imperative that there be a clear policy from the government that: (a) that the DBM only funds revenue-generating projects; (b) if it is to fund social benefit projects then the amount of lending to such projects be reflected in the state budget and therefore be capped by the structural balance and expenditures rules of the FSL; and (c) that there are some limits on the aggregate lending of the DBM to prevent overheating of the economy and to ensure macroeconomic sustainability.

133. The Law on the Development Bank needs to be amended to clearly state that the DBM’s mandate should be to fund revenue generating projects or to fund projects where due to a market failure the private sector is unable to provide loans. The determination of a revenue-generating project can follow a two-stage decision making process: first, a pre-feasibility study (PFS), as specified in the IBL, to determine whether the proposed project is a good project, such that the decision-making process on such projects follows a similar logic with the preparation of the PIP; second, a “value-for-money” (VFM) test, which determines whether the project should be financed by the DBM or as a traditional public sector procurement financed from the budget. VFM tests are commonly applied in deciding whether or not to finance an infrastructure project through a public-private partnership. The Korean government for example, requires a quite complex technical analysis, involves a comparison of a potential PPP project with the benefits and costs of a

comparator public investment project that would be financed through conventional public procurement. The calculations, which are carried out by the Korean Development Institute (KDI), an agency of the Ministry of Finance, take into account the financial incentives and guarantees that the government would have to provide in order to satisfy the requirements of the potential private sector partner.

134. A simpler approach could use a set of filters by which a proposed DBM project is evaluated before it can be approved.²⁵ There are three phases in this approach. Phase 1 is a pass/fail test which aims to eliminate projects which do not satisfy basic criteria for commercial financing — such as an identifiable source of revenues, suitability for implementation as a competitive tender, and availability of information. Phase 2 involves a quantitative evaluation of each project against criteria such as the perceived appetite and prospects for local or international private sector involvement, the easiness and speed of implementation and structuring of a transaction, and the project's expected socio-economic and development impact. Phase 3 entails further economic and financial analysis of projects to evaluate whether or not they are likely to be revenue-generating and therefore bankable. At this stage, a cash flow-based analysis is required to assess a project's profitability and its ability to generate revenues to repay investors over the life of the project.

135. A parliamentary resolution currently authorizes the DBM to finance both revenue-generating projects and "socially beneficial projects". Applying the above VFM criteria will likely require significant changes in the DBM's loan portfolio which currently only has two *a priori* viable projects, namely financing of the railways and a cement factory. If non-revenue generating projects are to be financed, then they should be explicitly included in the state budget, and therefore subject to the FSL structural balance and expenditure rule, the logic being that these will eventually fall on the budget anyway in the form of subsidies to the DBM.

136. Limits on DBM lending can be achieved by having a reasonable capital adequacy ratio, something of the order of 15 to 20 percent, rather than the 2 percent that is presently specified in the Law on the Development Bank. In addition, given that the DBM is likely to remain a major source of infrastructure financing and given Mongolia's macroeconomic vulnerabilities, it is also advisable to give the MoF authority to have oversight on the annual lending of the DBM. Specifically, the MoF could include in the budget and the medium term fiscal framework (MTFF) ceilings on the aggregate level of new borrowing and lending by the DBM during the coming three years, with the ceilings for the first year being binding on the DBM's operations. These ceilings would be calculated by reference to the ceiling on public sector debt included in the FSL, and an estimate of the development projects described in the Public Investment Program (PIP) that the DBM may be expected to finance during the period concerned. Currently, as per the Law of the Development Bank, the DBM requires "consent of the Government", in seeking loans; the Law does not reference the FSL, and there is no reference to compliance with the MTFF.

Eliminating "build-transfer" schemes

137. BT schemes involve very little transfer of risk from the government to the private sector partner, and increase the financing costs of infrastructure projects. The advice on this is simple: the government should discontinue these BT schemes and should instead finance such projects from the budget.

Strengthening the legal framework for public-private partnerships

138. Under the IBL, the MoF has now been correctly given the sole authority on evaluating fiscal risks of PPPs and issuing guarantees, again addressing a major weakness in the Concessions Law. However, this provision could be strengthened further given the particular risks that Mongolia faces. Some countries have established in law a quantitative limit on

²⁵ Based on PPIAF-World Bank (2010). Mongolia – Strategy for Public-Private Partnerships, Inception Report, October 2010. The study was carried out by the Public-Private Infrastructure Advisory Facility (PPIAF) and Cambridge Economic Policy Associates Ltd. (CEPA).

the government's aggregate exposure to fiscal risks through PPP contracts. In Hungary, for example, the total nominal value of multi-year PPP commitments must not exceed 3 percent of the government revenues in that year. In Brazil, expenditure derived from PPP contracts is limited to 1 percent of the net revenues of the fiscal year. While in the longer term, it may be preferable to incorporate PPP commitments into the fiscal rules set out in the Fiscal Stability Law, in the immediate term, introduction of a financial cap would be advisable. This would limit the government's exposure to fiscal risk during the period when the PPP policy is being developed and piloted, and the government is building its capacity to assess risk, and design and implement contracts. Other countries (e.g., the United Kingdom) have experienced severe financial losses on PPP contracts in the early stages of implementing their PPP programs.

STRONG CORPORATE GOVERNANCE FOR THE DEVELOPMENT BANK OF MONGOLIA

139. The vast majority of development banks across the world are either 100 percent or

majority government-owned and therefore government ownership in itself is not a determinant of success or failure.²⁶ Rather, the better performing development banks have been characterized by a sound regulatory environment and corporate governance principles, which include a clear mandate, clear ownership structure, independence of the board, checks against political interference, strong supervision, and regular performance assessment.

140. These are all areas that are currently lacking in the regulatory structure of the DBM, as elaborated on earlier, creating a high risk for politicization. In other words, the risk is not only that the DBM will violate the principles of the FSL but that the quality of projects it lends to will be poor. Box 3 elaborates on these principles which should be incorporated in an amendment to the Law of the Development Bank of Mongolia.

26 A recent survey by the World Bank of 90 development banks in 61 countries found that 74 percent of the banks were entirely government owned while another 21 percent had private sector minority shareholders.

Box 3: Some Principles for the Sound Governance of Development Banks

Clear Mandate: Development banks should have a clear mandate specified in law, including the sectors it should be operating in. The logic should be based on the market failure being addressed, and to ensure that the development bank is not unfairly competing with the private sector, nor financing activities with low potential for cost recovery and that should be done through the government budget. Achievements against the mandate should be regularly reviewed as the financial system develops to avoid hampering the development of the private sector, as for example done in the case of the Development Bank of Southern Africa.

Financial sustainability: Development banks need to be financially sustainable, that is be able to repay creditors without requiring subsidies from the government. This can be achieved by giving the Ministry of Finance adequate oversight, such as setting limits on development bank borrowing, and ensuring that the development bank has proper risk management systems in place. The government could set a required rate of return, such as zero in real terms, or equal to the government's long-term cost of funding.

Clear ownership structure: Government's ownership should be exercised through a shareholders representative, a clearly identifiable entity that is the exclusive channel of communication between the government and the development bank. Without a shareholders representative, any ministry or agency may see itself authorized to request financing from the development bank. The shareholder representative should be empowered to appoint the members of the

board of directors. The shareholder should aim to define the technical qualifications of each of the board members and these should be made explicit each time a vacancy on the board is being filled. To the extent possible, the shareholder should avoid nominating government officials as board members, and if they are to be appointed their numbers should be limited.

Board independence: In order to achieve efficiency, development banks need to be organized as corporations, with shareholders, board of directors and management. An effective board is one the most important success factor for a development bank. Board members should be appointed for fixed term tenures, ideally staggered, with clear procedures for termination so as to protect them from undue interference. Board members should ideally not be sitting government officials, and have relevant experience in finance. Canada's BDC and Chile's BancoEstado, two high performing development banks, have instituted specific mechanisms to discourage political intervention in the credit decisions. In the case of BDC, the Board of Directors' is required to be notified ant time whenever a Member of Parliament, Senator, or fellow board member exerts undue pressure on a BDC employee to, for example, finance a specific project. BancoEstado's law bans the possibility of lending money to public institutions.

Performance management: Performance contracts have proved to be a good instrument for achieving the difficult balance between autonomy and accountability that is needed in development banks. Performance contracts allow for autonomy which setting clear goals against which the board and management of the development bank will be held accountable. Contracts should ideally be concluded annually (before the start of the financial year), and made public to improve transparency and oversight.

Supervision arrangements: The ownership and supervision functions of the government should be handled by different agencies. Development banks should be supervised along the same principles as private sector banks, with requirements for high levels of disclosure, and sound risk management, and which would also ensure a level playing field between it and the commercial banks. Any government guarantees of development bank borrowings should be specified in the budget and ideally development bank funding for projects should be included in the budget for informational purposes. The responsibility for supervision could rest with the central bank, with the development bank obliged to provide prudential reporting to the central bank with the same frequency and reporting format as the other commercial banks. Similarly, a development bank should be subject to annual on-site inspections by central bank, covering all its treasury and risk management functions.

Sources: Thorne & Du Toit (2009); Gutierrez et al. (2011)

STRENGTHENING PROJECT PREPARATION

Ensuring a unified budget process

141. The NDIC was elevated to the Ministry of Economic Development (MED) in 2012. This move reflected a common consensus in government that the NDIC as an agency below the rank of a ministry had insufficient authority to carry out its important and necessary mandate for planning. The recently approved government structure however, has also transferred the

responsibility of evaluating and approving all capital projects to the new MED. This move is a mistake for two reasons: first, it creates the problems of a "dual budget". Second, MED will not have sufficient capacity to properly evaluate the over a thousand project proposals that it will receive each year from line ministries, with the result that project preparation will continue to be poor.

142. Sound budgeting requires that the capital and recurrent budgets be considered in an

integrated manner to achieve policy objectives. Such comprehensive decision-making taking into consideration both the capital and recurrent budgets is difficult to achieve if two separate organizations are responsible for preparing the capital and recurrent budgets (a “dual budget”). It may for example, result in investment projects being built that do not have adequate maintenance funding budgeted for the future.

143. In many countries such a unified policy is achieved through a powerful unified ministry of finance and planning. In Mongolia, to date, budgeting has indeed been integrated under the MoF; however, the MoF has lacked the capacity to properly review the capital projects submitted by line ministries — its Investment Division staff have not increased in the past 8 years despite a fourteen-fold increase in the capital budget — with the result that these lacked accurate cost estimations, had no economic analysis, and had weak links to national and sector priorities. Attempts to increase MoF’s planning and project appraisal capacity have been repeatedly made and repeatedly rejected by the cabinet and parliament. The reasons are mostly political. All central ministries are small in Mongolia and increasing the MoF’s staff may create a political imbalance and result in similar demands from all other ministries, demands that would have backing from the different political

factions represented by these ministries. It also reflected the parliament’s unwillingness to create a powerful MoF that would undermine its own considerable legislative powers over the budget. For both reasons therefore, the option of a powerful unified ministry of finance and planning does not currently appear to be politically feasible in Mongolia.

144. Given this political reality, the IBL attempted to strengthen investment planning by splitting the responsibilities between the MED and the MoF, while maintaining a unified budget process. As discussed earlier, the IBL added significant new provisions on the requirements that new projects had to fulfill, and detailed two distinct processes, one for large (greater than 30 billion MNT) and another for small projects. This splitting of responsibility for reviewing large and small projects between two agencies was necessary given that neither MoF nor the MED had enough capacity on their own to handle the huge task of ensuring that good quality projects enter the budget. For all projects the MoF is the single point of control on financing decisions. Importantly, the recurrent cost implications of the capital projects also need to be included in line ministry proposals and are an integral part of the capital budgeting process. Such a shared system for example, is found in Chile which has one of the most advanced public investment management systems in the world (Box 4).

Box 4: The Relative Roles of the Ministry of Finance and the Ministry of Planning in Managing Public Investment: The Chilean System

The Chilean system of public investment management (PIM) – in which responsibilities are shared between a planning ministry and a ministry of finance – has long been regarded as amongst the best anywhere. In broad terms the relative roles of ministry of planning (MoP) and MoF in Chile are as follows:

- Formulating institutions (sector ministries or agencies, or regional and local governments) put forward projects for consideration to financing institutions, which submit projects for appraisal by entering the project into the Integrated Project Bank (BIP), which is an interactive database of all projects.
- The Technical and Economic Analysis Unit in MoP (or in its regional agencies) conducts a pre-assessment study (pre-feasibility study).
- If this is positive, the project enters into the National System of Investments (SNI), which is currently administered jointly with the MoF. The SNI currently comprises an online databank with over 300,000 entries—i.e., ‘policy ‘initiatives.’

- The MoP conducts technical and economic appraisal for all public investment projects, including PPPs. It uses cost-benefit analyses or cost-effectiveness analysis as well as legal, environmental and gender analysis. Every public investment project is subject to the same appraisal discipline, under a set of clearly specified methodologies regularly updated by the MoP.
- MoP enters summary project data and its recommendation into the BIP system, and the results of its analysis are notified through the BIP.
- Even though projects receive favorable recommendations from MoP, they must still obtain funds in the annual budget process. Each ministry/agency decides which package of approved projects to submit for budget consideration, and these projects enter the 'Budget Formulation' sub-system.
- Both MoP and MoF analyze the recurrent costs of projects.
- Funding agreements are reached with the Budget Board of MoF.
- The law mandates that the capital budget sent by the MoF to Congress can only include projects within the SNI, which have also been favorably assessed by the MoP. This process screens out poor quality projects, and also rules out the possibility of members of parliament inserting investment projects that have not gone through the rigorous process — the only entry door is the SNI.
- A decree is issued for assigning funds, which is approved by the Comptroller General. For projects lasting more than one year there will be a financing agreement with the MoF (Treasury Board) regarding phasing and timeline.
- The executing agency is responsible for reporting progress using the execution section of the BIP system, and for updating project information in the BIP e.g. on contracts with suppliers. In addition, the Budget Board is notified of the budgetary advances.
- The MoF (Budget Board) is responsible for monitoring financial progress against budget, while the ministries and agencies maintain physical and financial control over progress.
- MoP is responsible for ex-post evaluation of a representative sample of projects.

Source: Arancibia (2008)

145. Our advice therefore, is that the IBL be implemented and that the MED be responsible for reviewing large projects only. The Government however, could consider lowering the threshold for these large projects from 30 billion MNT to a lower amount. The setting of the threshold should be based on an analysis of the public investment program and the distribution of projects by size, and realistic estimates of MED's capacity to conduct project appraisals.

Improving planning

146. To be effective the MED needs to base its advice on an effective consultation with the line ministries and not fall prey to the tendency of all too many central planning institutions of unilaterally identifying "winners and losers"

in terms of sectors, industries, and services. Therefore, the draft Law on Development Policy and Planning should also specify the consultative mechanisms to ensure that medium-term strategy is prepared collaboratively. One organizational mechanism for this consultation for the development of the Southern Gobi is for the MED to have a Southern Mongolia Infrastructure Coordination Unit within it to bring together the concerned ministries. The law should also mandate the creation of inter-ministerial committees as the formal consultative bodies for the preparation of the medium-term plan. In Malaysia, for example, the preparation of the five-year plans involves extensive consultations through inter-agency planning groups (IAPGs) that involve not-only line ministries but also civil society groups.

147. The draft Law on Development Policy and Planning currently sets out a large array of planning instruments and documents. The authorities should consider following the example of many developing countries which prepare only one main planning document, namely a medium-term (4-5 year) development plan, which is sometimes described as a strategic plan for reducing poverty. The PIP would be issued as part of, or as an annex to, the medium-term development plan, which may be rolled forward annually. The first year of this rolled forward plan could be the Social and Economic Guidelines (SEG) that are mandated in the Constitution. The core medium-term development planning instrument could be supplemented by additional instruments/documents. For example, a long-term strategic plan could be prepared, or be included as an introductory section to the medium-term plan; and subsidiary plans, which are consistent with overall government priorities, could be prepared for sectors such as mining and agriculture, and for the regions.

Implementing the IBL provisions on project appraisal

148. The IBL represents significant progress in improving the regulatory framework for capital projects by requiring that all projects go through a rigorous process — compliance with national and sectoral priorities, a socio-economic cost-benefit analysis, estimates of future recurrent costs — before inclusion in the PIP and the budget. Effectively implementing this provision will require clarity on (a) the precise roles and responsibilities of the line ministries and the MED in project appraisal and (b) calibrating the project appraisal methodology and requirements with existing capacity in the line ministries, MED, and MoF.

149. As noted, the IBL requires that all large projects undergo a pre-feasibility study (PFS) prior to inclusion in the PIP, with the responsibility to conduct the PFS given to the MED. This centralization of project appraisal is similar to the systems in Korea and Chile.

However, given that the MED is a relatively new agency with limited capacity, it may be advisable in Mongolia for line ministries to conduct the PFS based on guidelines developed by the MED and then for the MED to review the PFS and then make the decision as to whether or not the proposed project is sound enough for inclusion in the PIP.

150. The OECD countries, and other high performing middle-income countries, such as Chile and South Korea, have fairly advanced systems of appraisal in place that use some form of social cost-benefit analysis. Korea for example, uses a multi-criteria assessment technique that evaluates project pre-feasibility studies on economic cost-benefit analysis, policy relevance, and promotion of inter-regional equity. These systems have a level of sophistication that has gradually evolved over time, and which cannot be realistically transplanted to Mongolia at its current level of organizational capacity. Instead, what is required is a simpler system that can immediately provide the much-needed rigor to the appraisal process, and therefore significantly improve on existing processes, and which can evolve over time in sophistication in line with capacity.

151. It may be advisable for Mongolia to start by focusing more on the cost side of cost-benefit analysis for most projects, with the more sophisticated full socio-economic cost-benefit analysis limited to large, complex projects. Simpler methodologies for smaller projects are found even in advanced countries, such as Ireland (Box 5).

152. Such a simpler approach was developed in the “Guidelines for the Socio-economic Appraisal of Projects in the Public Investment Program of Mongolia” which were produced for the NDIC with the help of World Bank technical assistance. The proposed simplified appraisal process entails two. The first stage is a “yes/no” decision that can be used to reject bad projects early in the decision process so that scarce time is not wasted on any detailed evaluation of these projects. The second stage consists of

scoring projects that pass through this first-level screening on the basis of simplified prioritization criteria.

153. The “yes/no” stage assesses project proposals on whether:

- Credible evidence is presented that there is demand for the project and the services it will provide. The demand analysis should for example, show traffic volume projections for roads projects, trends in economic growth, which will have an impact on the demand for infrastructure services such as power, water and communications, and Population growth and demographic trends (age distributions, etc) that affect demand for schools and hospitals;
- There is a good explanation of which strategic national priority—as specified in a national or sectoral strategy or planning document—the investment relates to and how the project meets the requirements of that priority
- There is a basic financial analysis, with special focus on the estimation of capital (investment) and recurrent (operating) costs, and that the assumptions used in preparing the project proposal are outlined and are sound.

154. Projects that pass through this first stage are then ranked on a multi-criteria basis involving alignment with national or sectoral priorities, potential impact, and feasibility.

155. As noted in detail, inaccurate cost estimates are a big problem in project preparation requiring

frequent budget adjustments. There are at least three causes for cost over-runs: increases in construction material prices, use of overly simple methods to estimate costs that served as the basis for project appropriations, and projects inserted into the budget by Parliament that were not submitted for cost estimation in the same way as Government-proposed capital projects.

156. To improve cost estimates the Government will need to budget funds for research so that the costs for the various materials are regularly updated. In other words, the Government will have to spend more time and resources on project preparation before an appropriation is approved, with the knowledge that some of these projects may not eventually be approved. However, this added investment upfront will likely pay for itself through fewer delays and project cost adjustments during implementation.

157. The Government should also consider giving implementing agencies more authority in determining cost estimates. Currently in Mongolia, a specialized body — the Ministry of Construction and Urban Planning — develops cost estimates on construction materials for a number of line ministries. While this has the advantage of specialization and objectivity, the specialized body may lack the detailed knowledge of the particular project and imperfect coordination between the specialized body and the requesting ministry may lead to changes to the project characteristics after appropriations have been made.

Box 5: Formal Project Appraisal in Ireland

The Irish Department of Finance has Guidelines for the Appraisal and Management of Capital and Expenditure Proposals in the Public Sector (2005). The Guidelines specify the methodology for appraisal depending on the size of proposed projects, with the following classifications:

- Projects with an estimated cost below €0.5 million: A simple assessment to ensure that the project is in line with national priorities.
- Projects between €0.5 million and €5 million: a single appraisal incorporating elements of a preliminary and detailed appraisal.
- Projects between €5 million and €30 million: A Multi-Criteria Analysis (MCA).
- Projects over €30million: A full-fledged Cost Benefit Analysis (CBA).

Source: Glenday et al (2012)

Ensuring that projects proposed by MPs abide by the IBL

158. Finally, it is important that parliament also abides by the planning and capital budgeting principles laid out in the IBL. Mongolia's parliament presently has no limits on changing the budget presented by the executive, and has used its authority to include numerous bad projects. The FSL restricts parliament's discretion in the fiscal aggregates by requiring the budget to abide by the fiscal rules. It is equally important that individual projects proposed by members of parliament — which the parliament will continue to have the authority to propose — meet not only the broad principles of sound socio-economic benefit outlined in the IBL but also the more detailed project appraisal methodology to be specified in the implementing regulations. In other words, members of parliament should be proposers, just like any line ministry, and would need to support project proposals with the necessary pre-feasibility studies. Parliament proposed projects would then be subjected to the same project appraisal process specified for line ministry projects in the IBL and supporting regulations. This for example, is the case in Chile (Box 4). In terms of the budget cycle, this may imply that projects proposed during the parliamentary budget session, if they pass MED's or MoF's appraisal, could be considered for funding and inclusion in the capital budget for the following fiscal year. Alternatively, for projects to be included in the same fiscal year there needs to be a formal mechanism by which parliament can propose projects early during the budget preparation process.

GREATER CAPACITY, TRANSPARENCY AND OVERSIGHT IN PUBLIC PROCUREMENT AND PROJECT IMPLEMENTATION

159. Political interference and corruption are the biggest problems in procurement and contract implementation in Mongolia. The small size of the country, the close ties between politicians and construction companies, and the rapid increases in government spending imply that fixing this problem is a top priority if Mongolia is to avoid the resource curse. The PPLM brings

about a major overhaul of the public procurement system in Mongolia. The question is how to ensure effective implementation. Here we focus on the CPA and civil society monitoring.

The Central Procurement Agency

160. The three key challenges that the CPA will face are how to ensure that the centralization of procurement reduces corruption and increases transparency; how to properly coordinate with the line ministries that are still responsible for preparing the technical specifications and to clarify that they remain accountable for contract implementation; and how to scale up capacity quickly.

161. A priori, it is difficult to predict whether the centralization of procurement increases or reduces the risks of corruption and political interference. On the one hand, under the wrong leadership, the CPA will have much greater ability than multiple line ministries to compromise the procurement process given the scale of the procurement that will be conducted by it. On the other, the centralization and separation of procurement from the contract implementation function may also reduce the risk of political capture as compared to retaining both responsibilities in line ministries given the close links between political and business circles. The reasons are both the lower cost of monitoring the procurement process in one agency as opposed to several ministries; and the increased cost to those who would wish to influence contract award for their own personal and political interest since they would now need to effect the CPA as well as concerned line ministry staff since both will be involved in the bid evaluation committees. Retaining procurement authority with line ministries and increasing specialized procurement staff in them would not address this political economy problem since these staff would continue to be susceptible to the influence of their minister.

162. The key determinant of success will be the extent to which the CPA's operations are subject to transparency and oversight. The extensive use

of e-procurement will be important, though this would not entirely solve the problem of political influence in bid evaluation. The Procurement Inspectorate under the MoF will also clearly have an important role to play in supervising the procurement process. The Government is also considering the establishment of an Oversight Council under the Prime Minister, and with membership from the Independent Authority Against Corruption (IAAC), and the National Audit Office, to regularly review the functioning of the CPA. Strong supervision arrangements, either in the form of an independent body or the audit office are a common element in OECD countries (for example the Authority for the Supervision of Public Contracts in Italy).

163. These are all important measures. However, given Mongolia's small size and the fact that conflict of interests abound, it would also be advisable to subject some of the CPA's operations to international oversight. For high profile, and/or particularly sensitive contracting, the CPA should consider the use of "probity advisors", typically an international audit firm, on bid evaluation committees in order to provide independent procurement expertise in the event of disagreement. These advisors would be one of the civil society or private sector participants in the evaluation committee that is now mandated in the PPLM, and would be an independent observer who comments during proceedings when the appropriate governance standards are not being met. This provides the opportunity for the evaluation committee to maintain a robust process throughout and minimize the ex post risks of legal action and delays. The results of these "observer reports" could then be presented in parliament, and made available to the public.

164. The creation of the CPA in effect implies that procurement is a shared activity between the CPA and line ministries since the ministries will continue to be responsible for providing the technical specifications for the bidding documents and for contract implementation. This places a premium on clearly specifying roles and accountabilities and on effective coordination so that all stakeholders know for what they are accountable. If they are to effectively implement

the contract, the line ministries need to have a significant voice in the tender evaluation process. Therefore, the implementing regulations need to clearly state that the CPA takes responsibility for facilitating the administrative processes, i.e. advertising, disseminating tender documents, receiving and opening bids, and organizing evaluation committees. At the same time, it should be clearly stated in the regulations that the line ministry takes responsibility for the technical aspects of the procurement, such as the preparation of technical specifications and related requirements in the tender documents and the technical evaluation.

165. One way to achieve this division is that in the technical evaluation the line ministry should have the majority vote with respect to the technical issues (either when it comes to voting on technical issues or by way of a separate technical evaluation sub-committee, whatever is most efficient). In this way, the ministry cannot later deny responsibility for the technical decision should that have an effect on poor or improper implementation for which they, in any event, remain responsible. To provide a guarantee of probity, the CPA would be able to veto that technical decision whenever it considers the decision not to be genuine (e.g. through favoritism, incompetence or corruption) but it would have to provide reasons for the veto.

166. The CPA will also need to quickly ramp up capacity, given that it is meant to handle the procurement of common use items as well as specific goods, works, and services, a scope of responsibility that is much larger than that of central purchase agencies in the OECD countries, with the notable exception of Korea (Box 6). The Government is initially planning a staff of 65 for the agency. Currently there is no transition arrangement in place — as per the PPLM, the CPA and local governments have to handle all procurements starting January 1, 2013 — which creates a big risk that sufficient capacity will not be in place in time to have contracts finalized before next year's construction season commences. It would be advisable for the CPA to begin slowly with some selective contracts to give it sufficient time; this provision however, would require an amendment to the PPLM.

Box 6: Central Procurement Agencies in the OECD Countries

There are various organizational forms for central procurement agencies (or central purchase organizations) in the OECD countries, though the preferred model seems to be one of state owned companies with ownership resting with the Ministry of Finance. The general model in OECD countries is for these agencies to handle framework agreements, with line ministries responsible for strategic and specific procurements. A strong supervision function is also found in almost all of these countries, either exercised by an independent body, a competition authority, the audit office, or the courts.

- Hansel (Finland) is a state-owned company under the control of the Ministry of Finance. It has a staff of approximately 60, and handles framework agreements for common use items for most government entities, excluding municipalities
- SKI (Denmark) is a state-owned company with a majority stake held by the Ministry of Finance. It handles framework contracts and has a staff of 85
- Consip (Italy) is a joint stock company owned by the Ministry of Economy and Finance and is responsible for framework contracts for the central government, which are mandatory. It has a staff of 140. The Authority for the Supervision of Public Contracts, an independent agency under the Prime Minister, is responsible for the supervision of all procurement activities.
- Office of Government Commerce (OGC, UK) is an independent office of the Treasury responsible for procurement regulations and oversight. Its executive branch is Buying Solutions, which handles a range of framework agreements
- UGAP (France) is an independent public entity with a staff of 875 that manages framework agreements for the central government, local authorities and hospitals.
- Public Procurement Service (Korea): PPS is one of the few examples of a central purchase agency in an OECD country that handles specific procurements as well as framework procurements. It annually handles goods procurements of \$14 billion, or 46 percent of total public purchases; and works of \$ 14 billion, or 39 percent of total public works. It is also involved in the stockpiling of raw materials and management of government property.

Source: OECD (2011)

Civil society monitoring of procurement

167. The revised PPLM gives CSOs a big role in bid evaluation committees and in the monitoring of contract implementation. As noted earlier, similar initiatives have occurred in the Philippines and a few African countries, pointing to a different model of oversight than in the higher income countries where this responsibility lies almost entirely with the state audit bodies. No concrete evidence is as yet available as to whether or not this model has been successful in increasing transparency and reducing corruption, and it is clear from these experiences that the obstacles to successful implementation are many. The Mongolia initiative however, does have the advantage of being clearly authorized in law, which is not the case in most other countries, and of harnessing a relatively vibrant civil society sector, particularly

in the rural areas. Partnerships between CSOs and supervision engineers in contract monitoring can potentially be effective in ensuring that the supervisors are not “captured” by the contractors, as is currently the case; and that the technical analysis of the engineers is effectively used for advocacy purposes with the effected community and the broader public. Responding to this new authority, concerned CSOs from all over Mongolia have recently come together to form a network — the Public Procurement Partnership — to facilitate the engagement with the Government, provide necessary self-regulation and adherence to a code of ethics, and help in knowledge sharing and capacity building.

168. If CSO oversight is to be successful in Mongolia then it will require: (a) the development of sound implementing regulations for the PPLM

on governing civil society's role in bid evaluation and contract monitoring; (b) appropriate self-regulation by civil society groups engaged in procurement oversight to minimize conflicts of interest and to prevent CSOs from being "captured" by political and business interests; and (c) a sustainable funding mechanism to support CSOs in these activities.

CSOS ROLE IN BID EVALUATION AND CONTRACT MONITORING

169. The PPLM is unclear on whether non-government participants should be voting members or observers of bid evaluation committees. In order to maintain their independence, it is important that the CSO participants be observers and not voting members. Also, the liability issues entailed with being voting members may also prove as a deterrent for effective participation of CSOs.

170. The value of including non-government individuals on bid evaluation committees lies in the scrutiny they will bring to the bid evaluation process; they are unlikely to possess the specific sectoral knowledge needed to comment effectively on technical aspects of the bid. Therefore, the CSO members should ideally not comment on the technical evaluations but restrict their role to observing and commenting on the transparency of the evaluation process. This scrutiny might deter evaluation committee members from violating evaluation rules. Non-government observers may also discover violations, which they will then be able to report to the government and to the public, which, in turn, is likely to act as a deterrent for future violations.

171. A standardized reporting template — an "observers report" — should be developed for bid observers. The reports should ideally be submitted electronically and channeled to procuring entities and to the Ministry of Finance. Once the awards are made, the MoF suggested that the non-government observers be accorded the right to release non-confidential versions of their reports to the general public. The

publication of reports in the mass media can help to induce citizens to pressure the implementing agencies and contractors to fix any problems in the implementation of contracts.²⁷

172. To preserve the reputation of well performing CSOs, the CSO network and the government should have the ability to sanction CSOs. The CSO network can have the option to blacklist any members that makes egregiously false claims in its reports, and also look into situations where there is a disagreement about the findings between the government and non-government observers. At the end of each year, the MoF will receive the aggregated reports and complaints and should use a risk-based approach to review this aggregated information. The MoF should also work with CSOs and procuring entities to try and respond to problem areas. The Parliament and the Khurals (local councils) should be encouraged to review and discuss the aggregated reports, which will strengthen their vibrancy in the process.

173. The criteria that are used to select contracts for CSO monitoring should be transparent. High level authorization from the Cabinet and local parliaments is probably necessary to guarantee that CSOs receive access to the information from the procuring entities that they need in order to effectively monitor the selected pool of contracts. CSOs should be able to monitor both open and closed contracts and the performance of the contractors and the implementing agency. Monitors should observe whether the work is staying on schedule; the correct materials are being used; the contractors' employees are getting paid; and, the contractor is fulfilling the terms of the contract. To be effective, CSOs will likely need to partner with engineers or other technical specialists for this exercise. The engineers would bring the necessary technical skills to the table, while the CSOs would help ensure that these engineers remain independent and that their technical assessments are effectively used for advocacy purposes to ensure

²⁷ See Reinikka and Svensson (2005) for an argument as to how the publication of information in the media about the leakage of public resources can help to solve information asymmetries, induce clients to demand accountability from

public officials, and lead to government responsiveness.

transparency and accountability. The monitoring of closed contracts would likely need to focus on end user's satisfaction with the procured goods and works.

174. The Public Procurement Partnership can play a role in recommending CSOs for contract monitoring. In the short run, the qualification criteria for CSOs to monitor contracts should be rather loose (experience with monitoring budgets, service delivery, EITI). In the longer run, CSOs can compete to monitor contracts based on their past performance with contract monitoring. CSOs will clearly need to adhere to the terms of the procurement and if they are members of the CSO network, they will also need to adhere to the network's code of ethics. As long as they have the requisite experience, CSOs that are outside of the CSO procurement-monitoring network should also be able to participate in contract monitoring.

175. Since the real value of CSO monitoring is their role in promoting transparency, it is imperative that the monitoring reports be made public. However, the implementing agencies should be given an opportunity to comment on the reports' findings before it is made public by for example, allowing them a certain number of days (~15 days) to be able to respond to the monitoring reports after which point the reports become public. If there are disagreements between the CSO monitors and the government over report, the CSO network should investigate.

THE CSO PROCUREMENT NETWORK

176. The Public Procurement Partnership will be an umbrella organization with affiliates across Mongolia. The network's sustainability will depend on its members' ability to carry out the procurement monitoring effectively and transparently. Poor performance and misbehavior on the part its members can compromise the networks' funding by signaling poor quality while undermining the credibility of the procurement law.

177. The network is developing a self-regulatory regime that will constrain its members' behavior consisting of: 1) entry requirements, 2) monitoring mechanisms and, 3) the ability to sanction members. From a cross-national perspective, these entry and sanctioning criteria can vary in strictness, and self-regulatory regimes may be completely private meaning operating without any authority from or coordination with the state, or may involve a combination of government and NGO coordination (Box). The rules governing entry into a network vary and can include: 1) accreditation, training, certification, validation and licensing mechanisms; 2) evaluative mechanisms (such as ratings, grading, and scoring systems); 3) sectoral codes and other means to govern conduct (such as codes of conduct or ethics of various kinds); and 4) open entry.

178. In the short-term, to encourage the growth of CSOs interested in monitoring procurement in Mongolia, it is recommended that the Public Procurement Partnership enact loose entry requirements: prior experience with monitoring government processes (e.g. EITI, budgets, and elections); compulsory training for affiliates; and, agreement to its code of ethics. The network plans to offer training for its members on an on-going basis. In the longer term, the network may consider enacting stricter requirements including, for example, certification and prior experience with procurement monitoring procurement. Although stricter standards may act as a disincentive for participation, stricter standards are likely to send more powerful signals of the high quality of member activities.

179. Monitoring can range in stringency from self-reported verification to peer-verification systems.²⁸ In third-party verification systems, experts outside the organization certify compliance. Monitoring also varies in the extent to which members are required to disclose their monitoring information publicly. Stronger monitoring can be expected to produce a

²⁸ A survey of NGOs in Uganda found a large amount of variation in the reporting requirements to granting bodies. According to survey respondents, the most prevalent form of reporting requirements is the final report followed by final accounts. Most recipients are also required to submit progress reports and interim accounts and are visited by the granting body an average of five times per year (Barr and Fafchamps 2004).

more credible signal about participant quality, but stronger monitoring increases the cost of participation for organizations, potentially limiting program participation.

180. The absence of a common metric to evaluate its members' performance makes the task of monitoring member NGOs difficult. Nonetheless, the Partnership plans to monitor its members' participation through oversight from the board of directors, reviewing contract monitoring reports by looking into any

complaints or objections raised against the NGOs by fellow members, government officials or contractors. Other forms of monitoring mechanisms can include third party evaluations and supervision from donors or government authorities. Sanctioning mechanisms for networks can include fines, public sanctions and expulsion. Mongolia's procurement network emphasized that the network will primarily use blacklisting as a sanctioning device on members for violating the network's code of ethics or government regulations and laws.

Box 7: CSO Self-regulation and Sustainable Funding

Self-regulatory regimes

Gugerty (2007) identifies three types of CSO self-regulatory regimes: the guild, the voluntary club and the industry code. National guild systems are a form of professional self-regulation that exercises a monopoly over entry into a profession or industry. Only associations that are members of the guild are allowed to operate. A second type of voluntary regulation is the club, which are NGO-led associations, which lack a delegated monopoly over entry. Clubs develop standards, reporting requirements and monitoring mechanisms to which its members agree to adhere as a condition for entry. The major benefit clubs offer its members are reputational. The third type, the industry code of conduct, has no entry requirements aside from members' participation in the industry. The rigidity of the standards and reporting often vary across systems. Industry associations lack strong incentives to signal poor performance among members. Consequently, industry codes are likely to be less effective in influencing members' behavior than other forms of self-regulation.

For example, the Ethiopian 'club' is voluntary and composed of a code of conduct developed by Ethiopian NGOs and sponsored by the largest NGO association in the country, the Christian Relief and Development Agency (CRDA). The original purpose of the code was to establish a general assembly of signatories who would elect a Code Observance Committee charged with monitoring adherence and hearing complaints. In practice, establishing a separate body was difficult to implement and instead, the code observance committee was housed at CRDA – the largest, most representative NGO agency. The code combines aspirational values and verifiable financial and management practices, including providing publicly available annual reports and audited financial statements. CRDA has a fairly extensive screening process for applicants and all new CRDA members are required to sign onto the code upon joining. There is a waiting list of nonprofits, which are trying joining CRDA as the organization offers access to donor funding and a range of support services. Although there is a screening process for new applicants, CDRA does not require on-going reporting and does not monitor its members' adherence to the code of conduct.

Funding arrangements

Different governments, notably in Eastern and Central Europe, have implemented different arrangements for supporting CSOs. For example, the Hungarian government instituted the "1 % mechanism", which allows taxpayers to allocate one percent of their income tax to one CSO of their choice. Most public funding is directed to CSOs through ministry budgets

(direct funding, grant programs or ministry funds or agencies) and independently resourced public funds. To support NGO's operational costs beyond what NGOs receive from taxpayer contributions, the Hungarian Government established the National Civil Fund (NCF) in 2003. The NCF is governed by a Council and a number of regionally based Colleges. The Council, which consists of MPs and representatives from a Ministry and CSOs, is responsible for developing the priorities, strategies, and grant-making policies. The Colleges, which consist primarily of elected CSO representatives, are responsible for grant-making decisions (Hadzi-Miceva 2008).

In Croatia, various ministries, government agencies and organizations channel state funds directly to CSOs active in their sphere of activity. In 2007 the Government adopted a Code of Good Practice, Standards and Criteria for the Allocation of Grants for Programmes and Projects of Associations, the "Croatian Code", which sets out basic rules and procedures for all public authorities who distribute public funds. The Government Office for Associations and the Council for the Development of Civil Society, a specialized advisory body of the Croatian Government, is responsible for CSO policy and for interacting with CSOs. The Council is responsible for monitoring, analyzing, and evaluating the financing granted from the state budget, and ensuring compliance with the Code.

The National Foundation for Civil Society (funded mostly from lotteries) was established in 2003 to support CSOs. The Foundation has comprehensive grant-making policies including policies governing conflict of interest. The Foundation signed agreements with four regional foundations, which are responsible for managing grant programs in their specific regions. From 1999 to 2009, 27,543 projects of CSO were funded by the state, amounting to more than 320 million Euro of funding allocated to the sector. Most CSOs (about 70 percent) rely on funding from the central and regional/local government's budgets as the main source of funding (ECNIL 2011).

Sources: Gugerty (2007), ECNIL (2011), Hadzi-Miceva (2008).

SUSTAINABLE FUNDING ARRANGEMENTS

181. Sustainable funding arrangements that are shielded from political interference will be essential for the success of civil society monitoring. While development partners can, and should, assist the CSOs in the early stages it is critical that in the longer term CSOs develop a revenue stream that is independent of donor funding. The reasons are three-fold. First, donor funding is unpredictable and volatile, which can undermine CSOs' ability to plan its operations. Second, reliance on donor and international NGO funding also risks making CSOs more accountable to donors than to the communities they are meant to serve. Third and related, donor funding can change the composition of recipient CSOs. Gugerty and Kramer (2006) for example, find an association between external support for local groups and the characteristics of the groups' members. Among groups that received external support, there were larger numbers of

educated and wealthier members, but very little difference in the groups' productivity.

182. In the immediate term, the Government is considering providing funds for contract monitoring and bid evaluations. In the medium to long run, an independent national foundation can be established to fund different types of CSO activities including procurement monitoring. Examples from other countries (Box 3) suggest a model in which the foundation has a predictable and sustainable source of funding — from the budget, development partners, mining companies — and an independent board or council for making funding decisions for individual CSOs in various streams of activities (e.g. contracting out of service delivery, budget transparency, EITI, and procurement monitoring).

IMPROVING BUDGET EXECUTION

183. Mongolia's capital budget execution faces two particular challenges: an extreme climate that reduces the construction season to 6 months; and high volatility in the prices of construction materials that makes it difficult to fully anticipate costs during budget preparation. While the latter problem can be ameliorated with more carefully researched cost estimates, there is a "structural" element to the problem given that Mongolia is a small, rapidly growing open economy.

184. Greater flexibility in budget execution is required to meet these two challenges. The two usual methods are carry-over funding or multi-year appropriations, and giving spending agencies more authority for virements between projects. On the latter, the IBL has made significant progress by moving from a system where only parliament had the authority for virements to one where spending agencies have significant authority subject to common restrictions on budget adjustments between capital and recurrent expenditures.

185. Carry-over funding is a common feature in OECD budget systems to precisely prevent the normal bureaucratic tendency to spend the entire allocated budget for fear that any savings would imply a cut in future budgets. Most OECD countries allow carry-over funding to broad categories of expenditure subject to restrictions. These restrictions can take different forms, such as (1) a limit on the amount of carry-forward allowed in any given year, e.g., usually 3 percent of the appropriation; (2) a ceiling on the amount of accumulated carry forwards, e.g. 10 percent of the appropriation; or (3) limits on the draw-down of accumulated carry-overs.²⁹

186. The IBL introduces carry-over funding for capital projects with the first type of restriction, limiting the carry-over to 3 percent of the total appropriation. However, it only allows carry-over for three months, which implies that any spending in the next fiscal year would have to be completed before the new construction season

commences in May. Therefore, this provision does not do enough to solve the problem. In developing countries, such as Mongolia, it is indeed advisable to limit carry-over spending to multi-year capital projects, with strict limits to how much can be carried over, as set in the IBL, so as to ensure adherence to fiscal rules and to prevent large stocks of accumulated carry-overs from threatening aggregate fiscal management. However, the IBL should increase the carry-over provision to one year, while sticking to the 3 percent limit, to provide sufficient time for the completion of works while minimizing the fiscal risks.

187. Finally, the Investment Division of the MoF should not be involved in the authorization of payments as this is a function of the Treasury Department. In some countries, such as Albania, the responsibility for issuing payment orders is decentralized, with spending ministries carrying out these tasks and reporting back to the center. In commonwealth systems, payment authorization is the responsibility of the treasury. In any case, this is not the role of the budget department which should focus on the planning and project appraisal stages of the budget cycle.

ADDRESSING HUMAN RESOURCE CAPACITY CONSTRAINTS

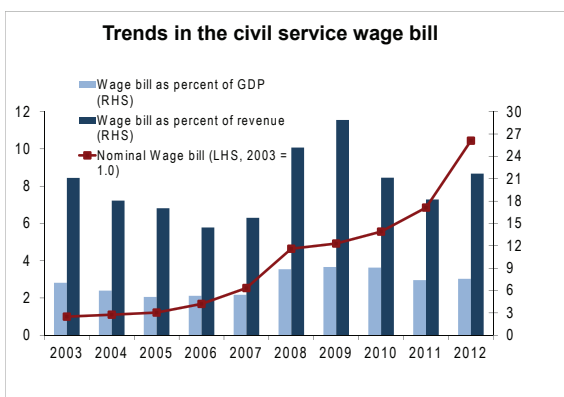
188. Limited number of skilled personnel is a persistent theme in many of the problems identified in this report. Key ministries and agencies in Mongolia are generally small — for example, approximately 150 staff in the case of MoF, 50 for MED, and 400 for Ministry of Roads and Transport — and the potential for significantly recruiting staff with the necessary technical expertise for planning, budgeting, procurement, and project implementation in the near term is limited. Worryingly, the booming wages in the mining sector are making it difficult to recruit and retain good quality civil servants in key positions. While there is no hard data on the scale of this problem, anecdotal evidence suggests that Government staff in jobs that are in high demand in the private sector, such as

²⁹ Lienert and Ljungman (2009)

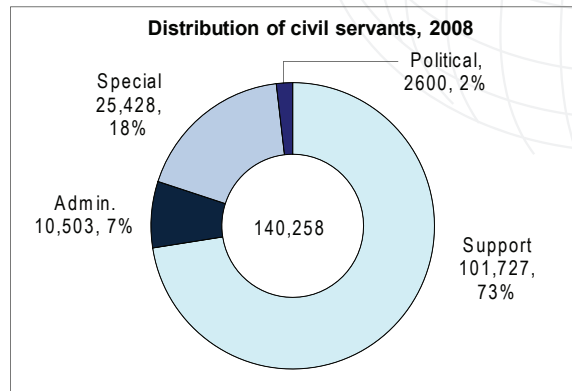
finance, revenue administration, engineering, procurement, and information technology, are tempted to leave the civil service due to the considerably higher pay — between five and ten-fold — in mining and related companies. The Government is also facing difficulties in recruiting personnel in these jobs. While civil service wages have been increasing through regular 15-30 percent across-the-board salary increases over the past five years — the nominal wage bill has increased ten-fold since 2003, when the mining boom began (Figure 27, left panel) — these increases cannot keep pace with the much higher growth in relevant private sector wages. And this problem is likely to increase in severity with continued high economic growth. The civil service wage bill presently remains affordable at 8 percent of GDP and 22 percent of revenue (Figure 27, left panel), but may not remain affordable if the government tries to consistently match the private sector with uniform salary increases for all staff.

189. It would be advisable for the Government to prepare a policy to ensure that civil service wages remain competitive. The first measure should be the gather more information on the scale of the problem and the emerging trends through a survey of civil service wages with those paid in the private sector for comparable jobs.

Figure 27: While the civil service wage bill is increasing it is fiscally sustainable and the Government can afford to significantly increase the salaries of the administrative service



Sources: MoF and Civil Service Council



190. If hard evidence reveals that “brain drain” is a problem then one of the options for the Government is a more flexible pay policy, replacing the current across-the-board salary increases with more targeted market-based salary premiums so that the pay increases vary by different categories of staff. The advantage of the targeted approach is that it allows limited budget resources to be used more effectively in addressing the problem.

191. The composition of the civil service suggests that such targeted approach can be feasible. The administrative service, or the managerial positions in line ministries, agencies, and local governments — the positions most vulnerable to the brain drain — makes up only 7 percent of the civil service (Figure 27, right panel), with the bulk of the civil service consisting of teachers and medical personnel, who are classified in the support service, that are unlikely to be as affected by the mining boom. Also, within the administrative service, not all ministries and agencies are likely to be equally impacted. Pay flexibility can take many forms, such as separate pay scales for different line ministries and agencies or additional pay for specific types of jobs in line ministries. Given the relatively small size of the core administrative civil service, and the huge increases in government revenue, the government should be able to afford significant additional pay for key staff in order to effectively address this problem. The main challenge will be political as such asymmetric pay reform has proven to be politically difficult implement in many countries. However, the positive underlying political economy factors in

Mongolia, discussed earlier, give some reasons for optimism.

192. A number of OECD countries, and a few middle income countries, have introduced pay flexibility over the past two decades. Pay flexibility can take many forms, such as separate pay scales for different line ministries and agencies; additional pay for specific types of jobs in line ministries; additional pay for hardship postings or postings to remote locations; and greater use of performance bonuses.

193. **Separate pay scales for different agencies.** In Chile, the so-called “controlling institutions” — Treasury, Budget Office, Superintendence of Pensions, Superintendence of Banks — have a separate and higher pay scale. In Indonesia, pay also varies considerably across central government ministries with the Ministries of Finance, Planning, the Supreme Audit Board receiving significantly higher pay.

194. **Higher allowances for specific categories of staff.** In Brazil, specific groups of employees such as in finance, budgeting, planning, management, legal and control have higher compensation levels compared to other groups. In Chile, each institution receives a budget envelope for the “critical functions” allowance from the Budget Office to distribute among their staff, with agency heads deciding who receives the benefit and how much the selected person receives, up to 100% of their remuneration. This allowance is normally used to increase pay of middle-management positions (for example, a Budget and Planning Manager for a line ministry).

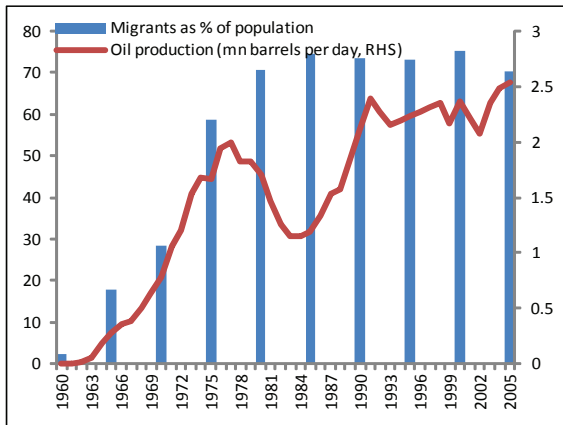
195. **Performance bonuses:** While there is considerable debate in the academic literature on the effectiveness of performance pay, the use of performance bonuses in the public sector is almost universal in OECD countries — 28 of the 34 countries have implemented it in some form or another — and it is increasingly being applied in middle income countries.

196. The Government will also need to rely on contracting-in and contracting-out the necessary

capacity. For example, it is unlikely that there will be sufficient time to get the central procurement agency up and running to carry out all assigned tasks over the next couple of years and therefore, the MoF should consider appointing a ‘procurement advisor’ for the purpose of both carrying out procurement on behalf of the CPA (like a traditional procurement ‘agent’) in the initial stages but also, and more importantly, to ‘mentor’ CPA staff through on-the-job training so that decisions will always, in practice, be made jointly. Similarly, NDIC would need to rely on academia, think tanks, and consulting firms to supplement its in-house project appraisal capacity. The Government’s recent discussion to outsource the supervision of road construction is a step in the right direction.

197. The problem of skills scarcity is obviously not limited to the government and over the medium to long term, clearly additional investments in the education system, including tertiary and vocational training to ensure that the economy can draw on a highly qualified pool of technicians, operators, engineers, and other professionals will be necessary. While educational clusters around resource-intensive sectors can form, as exemplified by the Norwegian experience, the costs of developing solid training systems are high, especially for developing countries. A more short-term solution can lie in providing scholarships for training abroad, at leading universities, with the explicit condition for students to return for a clearly defined minimum period of time. A similar system operates in Singapore and has helped build a highly skilled labor force. Alongside tying stipends to the condition of return, ensuring adequate levels of basic services across the country can minimize push factors encouraging emigration.

Figure 28: Oil production and migration in the United Arab Emirates



Sources: Energy Information Administration and World Bank

198. Realistically however, these measures will not completely ameliorate the fundamental constraint of labor scarcity in Mongolia, and the Government will need to learn from the experience of other labor scarce natural resource rich countries which relied extensively on importing both skilled and unskilled labor from overseas. Opening the borders to immigrants can plug the skills shortfall and produce knowledge spillovers that accelerate human capital formation. Today's major oil exporters in the Middle East all started to actively encourage immigration when oil was discovered in the 1960s (Figure 28). In 2010, migrants accounted for a considerable proportion of the countries in the Gulf region, with 25 percent in Bahrain, 30 percent in Oman, 44 percent in the United Arab Emirates, 74 percent in Qatar, and 77 percent in Kuwait. These migrant workers played a critical role in the development of the construction and services sectors in the Gulf countries. This pattern is also found in non-oil resource rich countries. Botswana, for example opened its doors to migrants to enhance its diamond production, and has since managed to attract qualified workers from across the African continent as well as from more developed nations.

199. Currently, international migration flows to Mongolia are low with migrants accounting for only 0.4 percent of the country's population. As noted, the policy for migrant workers is

restrictive, which in particular is hurting the growth of the construction sector. Generally, well-managed immigration can help small, resource-rich countries, attract skilled workers to develop the growth sectors and transfer skills to the local labor force. Thus, for multiple reasons, it will be imperative for Mongolia to build human capital both by investing in the skills of its native population but also by supplementing its capital stock through immigration.

CONCLUSION

200. This report has argued that translating the mineral resource boom into sustainable development in Mongolia is conditional on scaling up infrastructure, which in turn requires significant improvements in four key areas pertaining to the Government's public expenditure management system and the construction sector. It identified the key problems that need to be addressed to ensure that infrastructure is geographically prioritized and well maintained, and that individual projects are well prepared, procured, and implemented. It then made recommendations on improving some key pieces of legislation, on the details that need to be specified in the implementing regulations for the recently implemented laws such as the FSL, IBL, and PPLM, and proposed a strategy for addressing the common underlying problem of limited human resource capacity.

201. Following the parliamentary elections of June 2012, a new Government has taken office in Mongolia. This political transition presents a new window of opportunity to enact some of these reforms that can help turn the country's vast copper and coal resources into the sustained improvement in the lives of current and future generations of Mongolians.

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