

A Lebanon Sovereign Wealth Fund: Preliminary Recommendations

Ibrahim Jamali and Eric Le Borgne*

Abstract

Given its prospects of sizeable hydrocarbon wealth, Lebanon is in the process of designing an institutional framework to manage these resources. One such issue is the establishment of a savings-type Sovereign Wealth Fund (SWF), as required by the 2010 Hydrocarbon Law. Drawing from the relation between cross-country SWF experiences and institutional quality, this paper highlights some pitfalls and presents preliminary recommendations for Lebanon. Key among these is that a Lebanese SWF should be integrated with the budget system, some (limited) flexibility in operational rules, no/limited earmarking, no extra-budgetary spending, coherence with country investment strategy, and transparency and accountability.

1. Introduction

Preliminary 3D seismologic mapping of Lebanon's offshore reveals that Lebanon has strong prospects of having substantial hydrocarbon resources. These prospects, should they materialize, are still 5 to 10 years away from generating substantial revenue. Critical decisions, however, need to be taken early. These include designing an Exploration and Production Agreement, which will contractually govern the revenue flow that will accrue to Lebanon. Getting a fair deal for Lebanon is a pre-requisite for substantial revenue accruing to the country.

A large hydrocarbon discovery could generate new opportunities but also challenges for Lebanon. Opportunities include the possibility of finally having access to gas to run its gas-designed electricity power plants. Depending on the scale of the hydrocarbon discoveries, Lebanon could also become a net energy exporter of electric power generation. History, however, also points to challenges that countries have faced from such discoveries. These cover a wide spectrum ranging from the political, to the institutional to the governance of the hydrocarbon resources sector and the management of resource revenues. The governance challenges facing Lebanon are especially pronounced given the country's weak institutional framework, as detailed below. Cognizant of these challenges, the country—though the newly established Lebanese Petroleum Administration (LPA)—has already worked on designing a

* Economist, World Bank and Assistant Professor, American University of Beirut; Lead economist, World Bank.

For insightful comments, suggestions and questions, we would like to thank our World Bank colleagues, Samer Matta, Wissam Harake, and Kevin Carey, as well as participants at the 2013 Arab Economic Forum, a World Bank seminar, staff at the Ministry of Finance, the Banque du Liban, the Lebanon Petroleum Administration, the International Monetary Fund, and students of the American University of Beirut-Olayan School of Business where earlier versions of the paper were presented.

The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

sound legal and regulatory environment for the bidding and exploration processes. Under such an environment, investors have responded positively to the prospects of exploring Lebanon’s offshore potential.¹

Theoretical and empirical evidence suggest that countries with good initial conditions are more likely to benefit from non-renewable resource windfalls. Theoretical models point to several channels through which non-renewable resource windfalls would negatively impact an economy and its citizens’ welfare. These include increased rent-seeking (Tornell and Lane, 1999 and Velasco, 1999) or civil strife (Besley and Persson, 2008; Caselli and Coleman, 2011 and Ross, 2006). Cross-country empirical evidence reveals that countries with weak institutions and poor governance have been adversely affected by the discovery of a resource windfall.

Against this background, and given Lebanon’s weak institutional and governance ranking, prospects of a large hydrocarbon discovery in Lebanon points to some concerns. Lebanon is indeed characterized by high corruption perceptions and weak institutions, including regulatory enforcement (Table 1). As detailed below, based on these indicators, Lebanon shares many characteristics with several countries for which non-renewable windfalls turned into a bane instead of a boon. Lebanon’s poor ranking according to these indicators coupled with poor public sector governance, weak institutions and susceptibility to civil/sectarian strife further add to the cautionary stance that such windfalls would have in Lebanon if lessons from similar countries are not taken into account and mitigating measures adopted.

Table 1. Lebanon’s Transparency and Rule of Law Indicators

	Transparency International	World Justice Project - Rule of Law Index							
	Corruption Perceptions Index	Limited Government Powers	Absence of Corruption	Order and Security	Fundamental Rights	Open Government	Regulatory Enforcement	Civil Justice	Criminal Justice
Chad	163	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chile	22	0.74	0.74	0.70	0.73	0.68	0.66	0.66	0.60
Lebanon	127	0.57	0.42	0.68	0.65	0.47	0.38	0.45	0.49
Norway	5	0.90	0.94	0.87	0.86	0.84	0.82	0.76	0.79
Russia	127	0.31	0.39	0.49	0.47	0.41	0.45	0.50	0.40

Sources: Transparency International for the corruption perceptions index; the World Justice Project’s indicators for the rule of law scores (where 1 is the highest possible score that can be achieved and 0 is the lowest).

One common economic challenge that countries face when benefiting from a large resource windfall is the possible occurrence of the “Dutch disease”. The Dutch disease refers to the risk that sustained large external inflows, such as those occurring in the case of hydrocarbon-led windfalls, could rapidly stimulate aggregate domestic demand and the economy beyond its potential thereby creating inflationary pressures and leading to an appreciation of the real exchange rate relative to the country’s trading partners. This exchange rate appreciation would, in turn, diminish the export competitiveness of the non-resource part of the economy and possibly lead to persistent trade account deficits. While the resource-extraction sector can

¹ At the pre-qualification round in May 2013, the LPA received 54 applications from firms.

generate substantial revenues for the economy, the balance of payments and the government's budget, this sector is not labor intensive. Hence, any loss in competitiveness from the non-resource part of the economy could potentially result in large net employment losses. Mitigating this Dutch Disease risk in Lebanon, at least over the medium-term, is the expectation that revenue from the oil wealth will start flowing relatively gradually into the Lebanese economy as extraction capacity, which is years away, progressively expands.

In 2010, Lebanon passed a first series of legal and institutional measures aimed at managing its upcoming hydrocarbon wealth. On December 4, 2010 the parliament passed the Offshore Petroleum Law (Petroleum Law thereafter). This Law provides, *inter alia*, for the establishment of (i) a petroleum administration (established in December 2012: the Lebanese petroleum administration or LPA²) and (ii) and a sovereign wealth fund (SWF). Among the core immediate responsibilities of the LPA is the overseeing of the bidding process for offshore petroleum and the assessment of the bids/bidders. Work on one of these legislated institutions—a sovereign wealth fund—however, has yet to be initiated. In this spirit, this paper aims to draw lessons from cross country experiences with SWFs, highlight some pitfalls and draws preliminary recommendations for Lebanon as it moves towards establishing its own SWF.

Given the asset accumulation objective of several SWFs, these funds are rapidly emerging as important global institutional investors with trillion of dollars of assets under management. In line with the International Working Group (IWG)'s definition of SWFs, total assets under management by SWFs amounted to approximately US\$4 trillion in 2010 (Triki and Faye, 2011). As noted in Triki and Faye (2011), SWF managed funds are expected to grow to US\$10 trillion by 2015 according to OECD projections. Given the long-term investing objective of several large SWFs, these funds played a stabilizing role in the global financial system in the aftermath of the subprime mortgage credit crisis (Bolton, Samama and Stiglitz, 2013).

Additional instruments could be used to complement a SWF in achieving Lebanon's goals of managing its hydrocarbon resources. Countries have used other policy instruments to manage resource windfalls, in particular fiscal rules, fiscal responsibility laws, budgetary oil/gas prices, and/or participation in the Extractive Industries Transparency Initiative (EITI). Davis et al. (2003) and IMF (2012) provide an overview of the pros and cons of these various policy instruments.

While SWFs can be an effective resource revenue management tool, cross-country evidence reveals that, if not properly designed, significant drawbacks can arise. In light of the Petroleum Law requiring the establishment of a SWF in Lebanon, this paper defines what SWFs are, reviews different types of SWFs and closely examines the key design features that are likely to be required for the successful establishment of a Lebanese SWF. We draw on prior cross-country experience to offer some preliminary recommendations for the design of the SWF and discuss important issues relating to managing resource revenues.

² For details on licensing, regulations and seismic data, see the LPA's website: <http://www.lpa.gov.lb>.

2. Sovereign Wealth Funds: What Are They, What Are They Not?

Sovereign wealth funds are government-owned special purpose investment funds or arrangements. SWFs are essentially a pool of savings that are increasingly used by central governments to hold sovereign assets. They are created and owned by governments for general macroeconomic purposes. SWFs hold, manage and administer assets in order to achieve certain stated financial objectives that are aligned with their goals. SWFs employ a multitude of investment strategies, among which are investments in foreign assets, to achieve a certain financial return consistent with their objectives. SWFs are typically created from balance of payments surpluses, official foreign currency operations, the proceeds of privatization, fiscal surpluses, and/or receipts from commodity exports.

Assets held by central banks or state-owned enterprises are not considered part of SWF assets. Foreign reserves held by the central bank for traditional balance of payments or monetary policy purposes and government-employee pension funds are not considered as part of the SWF's assets. However, this does not preclude the central bank from being the designated manager of SWF assets, given its asset management expertise. Assets managed on the behalf of individuals also do not constitute a part of a SWF's asset base.

SWFs have disparate legal, institutional, governance structures and objectives. The International Monetary Fund and Santiago principles taxonomy identify four different types of SWFs. These are stabilization funds, savings funds, development funds and pension reserve funds.

The Petroleum Law requires that the proceeds from Lebanon's petroleum activities or rights be placed in a savings fund—a specific type of sovereign wealth fund. Specifically, Article 3 stipulates that “The statute regulating the Fund, the rules for its specific management, the principles of investment and use of proceeds shall be regulated by a specific law, based on clear and transparent principles for investment and use of proceeds that shall keep the capital and part of the proceeds in an investment fund for future generations, leaving the other part to be spent according to standards that will guarantee the rights of the State and avoid serious, short or long-term negative economic consequences.” SWFs with the goal included in Article 3, have been termed as savings funds as their goal is to accumulate financial assets in order to ensure that all future generations benefit equally from the extraction of non-renewal resources that have taken millions of years to form, not just the generation that happens to live in the country at the time these finite hydrocarbon resources were extracted.

Given their long-term investment horizons, savings funds typically have a high risk-return profile that allows them to cover future liabilities. Several countries have established savings funds (e.g., Abu Dhabi Investment Authority, Libya and Russia's national wealth fund). The primary risk facing savings (or future and endowment) funds is not to meet their real return target over time.

3. Commodity Price Volatility, SWF revenues and the non-resource primary balance: Some analytical issues

When considered as an asset class, commodity prices are highly volatile. Commodities exhibit higher volatility than other financial assets such as interest rates, exchange rates and stock prices (Gospodinov and Jamali, 2013; and Figures 1 and 2³). These high volatilities imply, in turn, that hydrocarbon revenues are highly uncertain and very volatile over time. This known resource revenue uncertainty should, therefore, be accounted for by policy-makers.

Figure 1. Crude oil prices are volatile...

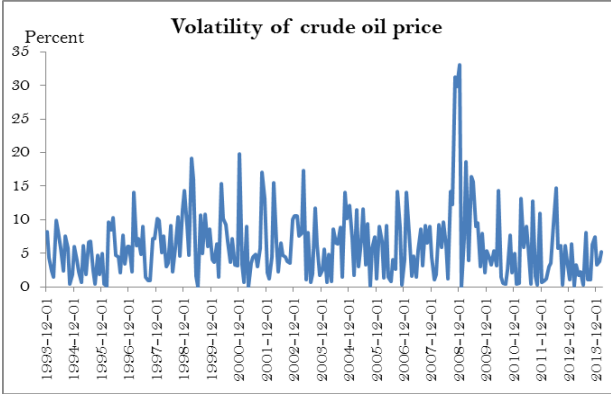
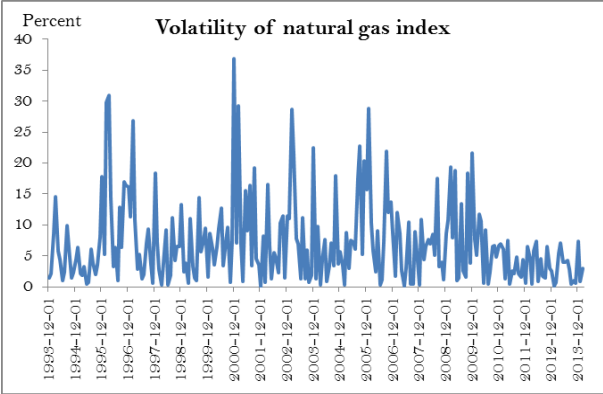


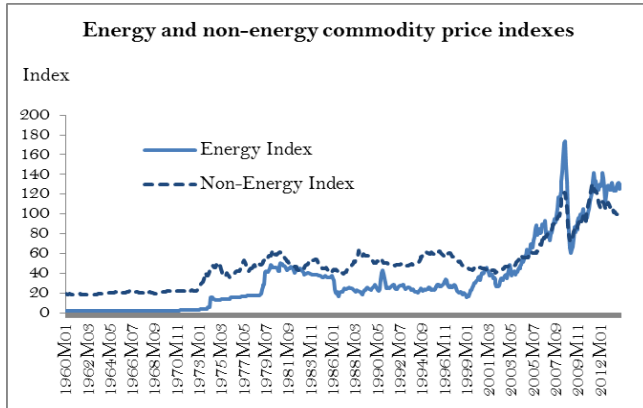
Figure 2. ...and so are natural gas prices



Source: World Bank and authors calculations
 Note: Volatility is computed as the squared monthly returns on crude oil or natural gas.

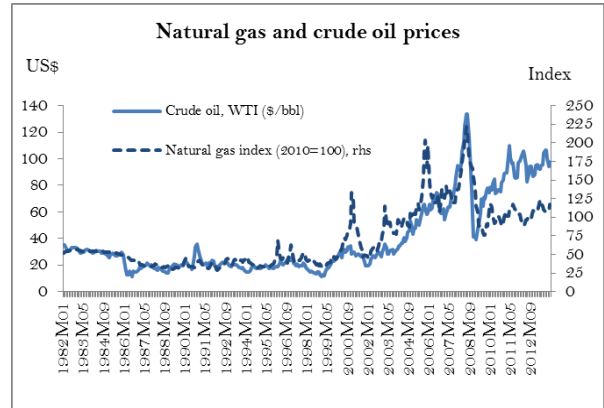
Besides high price volatility, commodity prices display long-lasting swings that complicate macroeconomic management (Figures 3 and 4). Resource exhaustibility, commodity price swings as well as the significant commodity price volatility require an adequate analytical framework for macroeconomic management in resource-rich developing countries. The IMF (2012) recommends employing the non-resource primary balance (NRPB) as a key fiscal indicator with a higher non-resource primary deficit indicating an expansionary fiscal stance. Using the NRPB assists policy makers in delinking fiscal policy from resource revenue volatility.

Figure 3. Long-lasting swings in energy and non-energy commodity prices...



Source: World Bank

Figure 4... are also present for natural gas and crude oil prices



4. Governance of SWFs

While governance structures differ across SWFs, there are certain principles of good governance that have been found to be desirable across countries. The Generally Accepted Principles and Practices (GAPP) of the International Working Group on Sovereign Wealth Funds provides detailed recommendations relating to good governance of SWFs.⁴ According to these, sound governance of SWFs requires an independent board, professional staff, transparent reporting, and strong and independent audit functions (Gelb, Tordo and Halland, 2014).

4.1. Corruption Perception, SWF Transparency and a SWF Scoreboard

Before detailing the principles of sound governance for a SWF, a brief discussion of the relationship between a country's corruption perceptions and the transparency and performance of its SWF is warranted. Bagnall and Truman (2013) measure SWF transparency based on 33 criteria that range from the SWF's structure, governance, behavior as well as transparency and accountability.

A positive correlation exists between the corruption perceptions index and the Bagnall-Truman SWF scoreboard (Figures 5 and 6). That is, the more corrupt a country's perception, the weaker the transparency and governance structure of its SWF. It is worth noting that high country-wide corruption perceptions do not necessarily translate into a low SWF score, as demonstrated by the scores of the Timor-Leste (TL) and Azerbaijan (AZR). In both of these countries, a large increase in hydrocarbon wealth was foreseen and, to mitigate the high corruption perceptions (along with weak governance and institutional capacity), these countries designed SWFs with strong governance structures.

⁴ GAPP principles 4 to 18 provide explicit recommendations relating to sound governance of SWFs.

Figure 5. Relation between a SWF scoreboard and the corruption perceptions index

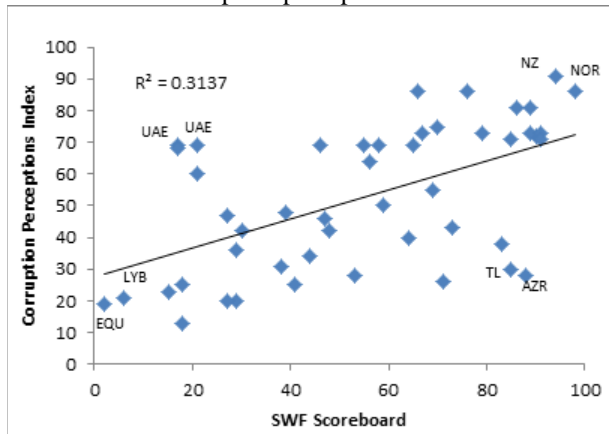
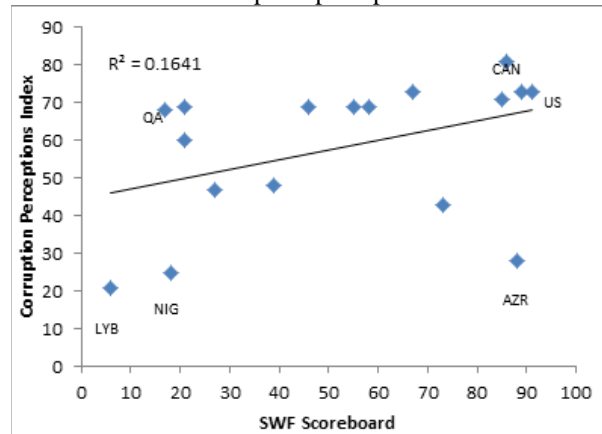


Figure 6. Relation between savings funds scoreboard and the corruption perceptions index



Source: authors based on data from Transparency International and Bagnall and Truman (2013). For the CPI, zero is most corrupt, 100 is not corrupt. For the SWF, zero is weak governance, 100 is very good governance.

Lebanon’s high corruption perceptions (2013 CPI score of 28) is similar to that of Equatorial Guinea (EQU), Libya (LYB), Timor-Leste (TL) or Azerbaijan (AZR). Establishing a SWF on sound governance principles would assist in achieving a score for the Lebanese SWF that is closer to Timor-Leste and Azerbaijan rather than to Libya and Equatorial Guinea.

An analysis of the breakdown of the best scoring savings funds criteria⁵ reveals that these funds have a clear objective, legal framework, structure, investment strategy, source of funding and are transparent in their use of funds. The role of management is also clearly defined. These funds undertake regular and independent auditing and adopt well-defined risk management strategies and leverage policies. Publishing quarterly and annual reports is another common characteristic among these funds. These good practices should inform the design of Lebanese savings fund especially that a good rating for the Lebanese SWF would assist in fostering confidence in, and support for, the new organization.

4.2. Principles of Sound Governance

In the Lebanese context which is characterized by weak institutions and high corruption perceptions, adhering to the GAPP principles of sound governance is critical. In line with sound corporate governance principles, the separation of ownership and control is a cornerstone of good governance. While a SWF is owned by the central government, government officials should not combine ownership and supervisory roles. Combining ownership and control leads to conflicts of interest situations that can undermine the functioning and integrity of the SWF (Gelb, Toro and Halland, 2014). Board independence is of crucial importance for the functioning of a SWF and members should be selected according to specific skills and experience. Committees nominating board members should also enjoy independence and objectivity so as to ensure a politically-independent selection process. In line with GAPP principle 16, the manner in

⁵ These are the Wyoming Permanent Mineral Trust Fund, Alaska Permanent Fund, Azerbaijan’s State Oil Fund, and Alberta Heritage Savings Trust Fund.

which the SWF management and ownership are operationally independent should be publicly disclosed.

4.2.1. Staff Recruitment

As with any financial institution seeking to meet its investment objectives, the recruitment and retention of competent staff is of central importance for investment success. A SWF should be staffed by experienced and well-trained investment professionals in order to meet its financial objectives. The abundance of human capital in Lebanon and the vast experience of Lebanese expatriates that assume leading positions in the regional and international financial sector should ensure no shortage of such qualified professionals. Lebanon's thriving banking sector could also be a source of recruitment of well-trained and experienced staff. Recruitment criteria and performance appraisals should be clear, transparent and fundamentally rooted in meritocracy. Staff recruitment should also not be subject to political interference or sectarian considerations. Maintaining gender equality in the recruitment process should also be encouraged.

4.2.2. Transparent Reporting and Auditing

Transparency and frequent reporting are critical to reduce risk of 'raiding' and rent-seeking. Governance should entail clear reporting lines and accountabilities, clear investment guidelines (e.g., asset allocation, scope for active management, universe of permitted asset classes) to ensure that implementation is consistent with the government's risk tolerance and broader fiscal policy objectives. Linking staff compensation to external benchmarks may also help to avoid rent-seeking and strengthen transparency while allowing for recruitment of skilled investment professionals. Cash flows should also pass through the treasury single account to enhance transparency and facilitate cash management.

Establishing internal and external audit functions for a SWF are a vital component of good governance. Establishing an independent internal audit function, which reports directly to the board of directors of the SWF, is a vital component of good governance. An external audit by an internationally-renowned firm should also be undertaken annually. Annual auditing in accordance with existing national and international accounting standards is in line with GAPP principle 12. The high corruption perceptions in the Lebanese public sector make the establishment of sound internal and external audit functions of vital importance for the efficient functioning of the SWF and for the public to be confident their assets are properly managed.

Transparent reporting of activities is another central element of good practice. Transparent internal (to the owner and the board of directors) and public reporting of the objectives of a SWF, its activities, portfolio of assets and returns is another important component of good governance. The requirement for transparent reporting is consistent with GAPP sub-principle 18.3. External public reporting of the holdings, performance and objectives of the SWF would significantly strengthen the incentives for proper management of the SWF's assets.

4.2.3. Accumulation and Withdrawal Rules

An important design feature for a successful SWF would be to clearly define the rules governing the accumulation and withdrawal of funds from the SWF. The former specify the proportion of SWF funds that are to be saved/spent, while the latter specify the conditions under which the government can withdraw funds from the SWF (see Table 2 for cross-country rules adopted). These rules can either be discretionary or automatic (rule-based). A rule-based approach would entail transferring part of the resource revenue to the budget when, for example, the resource price exceeds a certain threshold. However, in practice, it is also important to allow some limited discretion—as discussed in the policy recommendations section.

Table 2. Cross-country SWF objectives, accumulation and withdrawal rules

Fund	Objectives	Accumulation Rule	Withdrawal Rule
Kuwait - General Reserve Fund	Stabilization and savings	Residual budgetary surpluses	Discretionary transfers to budget
Kuwait - Reserve fund for future generations	Savings	10% of all government revenue	Discretionary transfer to the budget (approved by national assembly)
Norway - Global pension fund global	Stabilization and savings	Net government oil revenue	Discretionary transfers to the budget to finance the non-oil deficit
Oman - State General Reserve Fund	Savings	Since 1998, oil revenue in excess of budgeted amount	Discretionary transfers to the budget
Oman - Contingency Fund	Stabilization	Residual oil revenue after budget support and allocation to SGRF	Not disclosed
Oman - Oil Fund	Stabilization	Since 1998, market value of 15,000 Bopd	Not disclosed
RB Venezuela - Investment Fund for Macroeconomic Stabilization	Stabilization	Since 1999, 50% of oil revenue above reference value, with exceptions	Transfers
Timor Leste - Petroleum revenue fund	Stabilization and savings	All petroleum revenue and income	Discretionary transfers to the budget to finance the non-oil deficit withdrawals not to decrease the permanent income derivable from the Fund. Parliament to decide.
Alaska Permanent Reserve Fund	Savings	50% of eligible mineral revenue	Principal (inflation proofed) invested permanently. Use of earnings decided by governor/legislature
Alberta Heritage Saving Fund	Savings (pre-1997 also economic and social)	30% of resource revenue until 1983. 15% between 1948-87 transfers discontinued	Discretionary transfers to the budget
Azerbaijan - State oil fund	Savings, economic and social development, investment in the oil sector	Government petroleum revenue by nature (defined by law)	Discretionary transfers to the budget to finance the non-oil deficit (approved by parliament), plus special expenditure determined by presidential decree, subject to withdrawal limit)
Chad - Revenue management program	Stabilization and savings. Future generation fund discontinued in 2005.	Net government direct oil revenue	Earmarking to priority expenditure set by law until 2006. From 2007, discretionary transfers to the budget to finance non-oil deficit
Chile - Copper stabilization fund	Stabilization	Based on discretionary reference price determined by the government	Transfers to the budget (and extra budgetary lending) symmetric to accumulation rules.

Source: Le Borgne (2012).

5. Use of SWF resources

Economic theory offers guidance on the use of a SWF's resources. The permanent income hypothesis entails allocating a SWF's resources so as to smooth wealth and consumption over time (Collier et al., 2010). While this may appear equitable, it may not be optimal for a resource-rich developing country (RRDC) to adopt such a policy. Indeed, the simple form of the permanent income hypothesis needs to be augmented with other models that incorporate development challenges that countries face. Depending on a country's stage of development and institutional capacity and characteristics, this could result in the need to either front-load or back-load the use of the SWF assets over time.

Front-loaded spending is especially relevant in a developing country context where infrastructure bottlenecks exist. For example, Wakemann-Linn et al. (2004) explicitly note the need for front-loading when (i) jump-starting an economy in a "development trap" is required, (ii) political economy factors, such as alleviating income inequality, exist and (iii) maintaining intergenerational equity (tilting the consumption to the relatively poorer current generation) is an important goal.

Back-loaded spending is warranted when rapid SWF expenditures are constrained by (i) capacity constraints, (ii) Dutch disease considerations, (iii) governance and intergenerational equity issues, and (iv) unknown future liabilities (such as pension liabilities). A hybrid SWF could be designed to address these issues: revenues could be "parked" in a short-term fund to be phased in to the economy as concomitant improvements in absorption capacity are being made. Such an approach needs to balance the risks that the fund could be tapped prematurely with loss of public support for the fund if it is not seen as meeting the needs of the country due to excessive back-loading. In Lebanon, a thorough analysis of the disbursement profile of the SWF

is warranted as the country combines features that would warrant either a front- or a back-loading of the resources so that the net impact is uncertain.

6. International experience with SWFs and relevance for Lebanon

Several institutional risk factors should be accounted for and mitigated when designing a SWF. Lebanon suffers from high structural fiscal deficits and debt which create significant institutional risks for a new SWF. Specifically, a Lebanese SWF might be prone to direct or indirect raiding. Direct raiding occurs when the fund's resources are used for purposes other than originally intended. Indirect raiding refers to excessive debt accumulation on the back of the fund's resources. Contingent liabilities, for example from the financial sector, are a potential source of indirect raiding. Another important institutional risk is the inefficient management of the SWF funds (due, for example, to corruption or mismanagement if the Fund is staffed based on confessional considerations rather than meritocratic ones). As detailed below, these challenges should be mitigated using clear legal and institutional arrangements that are specific to Lebanon.

Cross-country experience shows that SWFs have not been always successful in achieving fiscal goals. An analysis of SWFs in the Asia-Pacific region by Le Borgne and Medas (2007) showed that these include volatile government spending and fiscal deficits, the accumulation of expensive debts and/or payment arrears and significant or complete depletion of the SWF resources. The causes of the fiscal challenges range from poor cash management coupled with rigid SWF withdrawal rules, to depletion of reserves due to required contributions to SWF, to use of SWF funds as collateral to finance fiscal deficits, to risky and/or undiversified investments, and to mismanagement and poor governance. Looking at experiences with African SWFs, Triki and Faye (2011) note that problems arise from weak institutional arrangements amid high corruption. Chad, a country similar to Lebanon in terms of high corruption perceptions (Table 1), faced governance problems due to poor enforceability of existing institutional arrangements.⁶ Given its fiscal challenges and some institutional weaknesses, Lebanon is particularly prone to these challenges.

7. Designing Lebanon's SWF: preliminary recommendations

The cross-country lessons from SWFs should critically inform the design of a Lebanese SWF. In light of Lebanon's fiscal, institutional, and governance challenges, the SWF design and objectives should be consistent with an overall fiscal and macroeconomic framework for the country. The SWF design should include strong outflow controls and cash management needed for the SWF to achieve the objectives of limiting the size and the volatility of spending. Accumulation and withdrawal rules should always be clearly defined. It should be noted, however, that rigid operational rules to operate a savings fund would limit (by design) the ability to use the SWF funds for fiscal stabilization and, potentially, to adjust to changing circumstances. Having a savings SWF and using it for stabilization purposes would likely result in large financial losses and ultimately defeat its policy objective and societal goal of providing

⁶ For instance, Chad amended its national revenue management law in 2005 in order to increase the share of oil revenues going into the budget. The country subsequently introduced discretionary expenses and cancelled the fund for future generations.

benefits for future generations of Lebanese.⁷ The asset management strategy (including the choice of the risk-return tradeoff) must be consistent with the SWF policy objectives. This inconsistency has been the cause of many bad experiences (Le Borgne and Medas, 2007).

A Lebanese SWF's design should have limited flexibility, be transparent and integrated within the country's fiscal systems and consistent with its investment strategies. A number of desirable design features should be implemented in a Lebanese SWF. These include integration with the budget system, some (limited) flexibility in operational rules, no (or limited) earmarking but no extra-budgetary spending, coherence with country investment strategy, and transparency and accountability. We provide further details regarding each of these design features below.

A Lebanese SWF's revenues should be integrated with the budget systems (i.e., outflows should go to the government budget and not outside, such as to an extra budgetary fund). Such integration would ensure that spending decisions are aligned with fiscal policy and address fungibility challenges (e.g., Norway, Timor Leste). In principle, a SWF should not duplicate the budgetary functions of the Ministry of Finance. Spending and fiscal policy decisions should remain with the government and the SWF should transfer resources to the budget, as warranted under the SWF's outflow rules.

The SWF should have limited flexibility in operational rules. While adopting flexible deposit and withdrawal rules would facilitate the use of funds for stabilization this would run counter to the savings objective that Lebanese legislators have decided in the 2010 Petroleum Law. However, limited flexibility might be warranted and allowed under exceptional circumstances (e.g., national disaster). In such cases, the financial needs of the country and the cost at which the country might have to borrow could be so high that using slightly more of the SWF funds than usual would be in the long-run interest of the country. This flexibility should be exceptional otherwise it would deplete the assets of the SWF.

The SWF should have no (or at worst limited) earmarking and should not be allowed to finance extra-budgetary spending. This enables (i) flexibility in adjusting to changing conditions and priorities (as decided by the government's annual budget and as approved by Parliament), (ii) efficiency of spending through competition for resource between priority areas, (iii) simpler liquidity management, and (iv) enhanced transparency and governance.

A SWF's investment policy should be coherent with the country's overall investment strategy. Integrating the SWF's investment strategy into the country's broader fiscal and asset management strategies avoids financially ill-advised situations where a country could be simultaneously holding public debt on expensive terms while accumulating assets in a SWF for which the financial returns are below the interest rate paid on its debt. Such integration is especially relevant for Lebanon given its high and costly public debt. As with any institutional

⁷ As discussed earlier, a savings SWF would have as a financial objective to match the returns of long-term indices. To do so it would have to invest in asset classes with high risk-return, and therefore high price volatility and potentially limited liquidity. Should politicians during a recession require the SWF to liquidate its assets to help pay for a fiscal stimulus program, then the SWF would have to liquidate some of its non-liquid and high volatility portfolio at the worst time (when assets prices of high risk-return assets are significantly down). Such a misalignment between the investment strategy and the use of the SWF assets would result in large financial losses.

investor, a SWF portfolio allocation strategy should maximize risk-adjusted financial returns conditional on the underlying fiscal objectives. Lebanon's overall balance sheet contains significant liabilities. The large public debt coupled with a high fixed interest rate on foreign currency denominated debt (the average weighted interest rate on Eurobonds was 6.49 percent in October 2013) entails sizeable outflows. A Lebanese SWF should take into account Lebanon's significant liabilities when deciding its portfolio allocation.

From a purely financial perspective,⁸ some revenue from Lebanon's hydrocarbon resources might initially be used to pay down some of the country's debt. From an asset-liability perspective, when hydrocarbon resources are initially turned into financial assets, rapid asset accumulation of SWF assets might be inferior to repaying some of the country's sovereign debt as this could generate a large drop in the country's risk premium and improve the country's sovereign rating. This in turn would lower interest rates at which the private sector can borrow, improve competitiveness and boost growth. Once Lebanon's risk premium has been reduced sufficiently, the payoff on further reducing the country's debt as opposed to accumulating financial assets more rapidly in the SWF would no longer be optimal. At that time, outflows from the SWF should be significantly reduced (instead of being used in an accelerated manner to pay down some of the country's debt) so that assets rapidly accumulate in the SWF.

As international evidence and experience shows, for a country like Lebanon, which is facing weak institution and governance, transparency and accountability should be core design features of a newly established SWF. Fund oversight, including performance reports, external audits and clear standards for disclosure of information can promote better performance, limit corruption and build public confidence in the management of resource revenues. This, in turn, will foster public support for the fund.

⁸ As noted earlier, financial considerations are only one of the factors to consider regarding the best use of the SWF resources. Thus, once all factors, such as economic, institutional, governance, financial are taken into account, it could be that rapidly repaying Lebanon's large public debt is not warranted.

References

- Al-Hassan, Papaioannou, Skancke and Sung (2013) “Sovereign wealth funds: Aspects of governance structures and investment management”, IMF Working Paper No. 13/231, Washington DC.
- Bagnall and Truman (2013) “Progress on sovereign wealth fund transparency and accountability: an updated SWF scoreboard”. Policy brief, Petersen Institute for International Economics.
- Besley and Persson (2008) “The incidence of civil war: theory and evidence” National Bureau of Economic Research, Working paper No. 14585.
- Burghardt (2008) “Volume surges again: global futures and options trading rises 28% in 2007”, *Futures Industry Magazine*, March/April, 15-26.
- Caselli and Coleman (2011) “On the theory of ethnic conflict” Unpublished manuscript.
- Collier, van der Ploeg and Venables (2010) “Managing resource revenues in developing countries”, *IMF Staff Papers*, Vo. 57, 84-118, Washington DC.
- Gospodinov and Jamali (2013) “Monetary policy surprises, positions of traders and changes in commodity futures prices”, working paper 2013-12, Federal Reserve Bank of Atlanta.
- Le Borgne and Medas (2007) “Sovereign wealth funds in the pacific island countries: macro-fiscal linkages”, Working Paper 07/297, International Monetary Fund, Washington DC.
- Tornell and Lane (1999) “The voracity effect,” *American Economic Review*, Vol. 89, pp. 22-46.
- International Working Group on Sovereign Wealth Funds (2008) “Sovereign wealth funds: Generally Accepted Principles and Practices “Santiago Principles”
- Triki and Faye (2011) “Africa’s quest for development: Can sovereign wealth funds help?”, Working paper series, African Development Bank Group.
- Velasco (1999) “A model of endogenous fiscal deficits and delayed fiscal reforms”. In *Fiscal Institutions and fiscal Performance*, edited by James M. Poterba and Jurgen von Hagen, 37-68. Chicago: University of Chicago Press.
- Wakeman-Linn, Aturupane, Danninger, Gvenetadze, Hobdari and Le Borgne (2004) “Managing oil wealth: The case of Azerbaijan”, Discussion Paper, International Monetary Fund, Washington DC.