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Lebanon Economic Monitor

THE ECONOMY OF NEW DRIVERS AND OLD DRAGS

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PREFACE

The *Lebanon Economic Monitor* provides an update on key economic developments and policies over the past six months. It also presents findings from recent World Bank work on Lebanon. It places them in a longer-term and global context, and assesses the implications of these developments and other changes in policy on the outlook for Lebanon. Its coverage ranges from the macro-economy to financial markets to indicators of human welfare and development. It is intended for a wide audience, including policy makers, business leaders, financial market participants, and the community of analysts and professionals engaged in Lebanon.

The *Lebanon Economic Monitor* is a product of the World Bank's Lebanon Macro-Fiscal Management (MFM) Global Practice team. It was prepared by Wissam Harake (Economist) and Samer Matta (Economic Analyst), under the general guidance of Eric Le Borgne (Lead Economist) and Auguste Kouame (Global Practice Manager). Massimiliano Cali (Trade Economist) and Wissam Harake (Country Economist) co-authored the Special Focus on the impact of Syrian refugees on trade. Daniel Daurella (Economist) authored the Special Focus on energy, while Claire Kfoury (Senior Water and Sanitation Specialist) did so on water. May Ibrahim (Senior Executive Assistant) and Mona Ziade (Communications Officer) provided Arabic translation, Nada Abou-Rizk (Program Assistant) provided French translation and Zeina El Khalil (Communications Officer) print-produced the report.

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LIST OF KEY ABBREVIATIONS USED

bps	Basis points
H1, H2:	First half of the year, second half of the year.
3mma:	Three-months moving average
pp	Percentage points
Q1 (Q2, Q3, Q4):	First (second, third, fourth) quarter of the year
qoq:	Quarter-on-quarter
sa:	Seasonally adjusted
saar:	Seasonally adjusted, annual rate
yoy:	Year-on-year
LHS, RHS:	Left hand side, right hand side (for axis of figures)

EXECUTIVE SUMMARY

I. Lebanon continues to be impacted by the domestic political stalemate and regional turmoil, particularly along its border with Syria. Political paralysis as symbolized by the presidential vacancy since May 2014 persists, while the influx of Syrian refugees decelerated significantly after the Lebanese government imposed entry restrictions. Nevertheless, UNHCR-registered Syrian refugees amount to 26 percent of the population.

II. Economic activity picked up in the second half of 2014. Stronger economic performance and lower oil prices pushed real GDP growth to an estimated 2.0 percent in 2014, compared to 0.9 percent in 2013[1], led by private demand. Renewed improvement in security conditions so far in 2015 and the launch of dialogue between opposing political parties are likely to positively impact consumer and investor confidence. In addition, continuously low oil prices are expected to have a positive net impact on the economy. As a result, real GDP growth this year is projected to further accelerate to 2.5 percent.

III. One-off cosmetic and unsustainable measures rather than policy actions helped improve the fiscal balance in 2014. We estimate the overall fiscal deficit to have declined by 2.3 percentage points (pp) to reach 7.2 percent of GDP, and the primary balance to have reverted back to surplus after two years in deficit. An increase in domestic debt service, however, drove public debt higher, albeit at a slower rate than a year earlier, to around 145.7 percent of GDP by end-2014. In 2015, reduced transfers to Electricité du Liban (EdL) from falling oil prices are expected to be offset by higher debt servicing due to expected tightening of US interest rates to, leaving the fiscal position largely unchanged.

[1] World Bank staff estimates.

IV. Declining imports lead an improvement in the current account balance. In 2014, a fall in merchandize imports induced a 4.4 pp reduction in the current account deficit to a still-elevated 22.2 percent of GDP. This trend is projected to continue in 2015 helped by falling oil prices and a depreciating euro, further narrowing the deficit by a projected 5.5 pp. As a result, the gross foreign reserves (excl. gold) at the central bank reached US$ 32.4 billion (equivalent to 11.6 months of imported goods) by end-2014.

V. A significant output gap in addition to declining oil prices led to a deceleration in prices. Headline inflation plummeted from 2.7 percent in 2013 to 1.9 percent in 2014 and is expected to remain tempered over the medium term. This, in addition to exchange rate stability and a sizable output gap, supported continued expansionary monetary policy; the central bank injected $800 million dollars in 2014, with an additional injection expected in 2015, in the form of subsidized loans primarily destined for the real estate sector.

VI. Lebanon's economy continues to be exposed to external shocks. The border with Syria is increasingly menacing as coordinated attacks by ISIS and Al Nusra are being launched more frequently from their bases in Syria. Moreover, with reasonable prospects for Fed tightening this year, Lebanon would be bound to follow suit to maintain the margin on US$ and LBP deposits in Lebanon. This will negatively impact lending to the private sector and raise Lebanon's large debt service, as new debt will need to be contracted at higher interest rates given large gross financing needs.

VII. Evidence suggests that Lebanon's international trade has not been negatively impacted by the Syrian conflict (Special Focus).

Our analysis finds the following notable results: (i) the war seems to have affected neither merchandise nor services exports at the aggregate level; (ii) while Lebanese exporters to Syria have suffered from a drop in demand in the Syrian market, other Lebanese exporters have started to export to Syria to fill the gap in Syrian production; and (ii) Syrian refugees in Lebanon provide important impetus to Lebanese services exports.

VIII. Inefficiencies in power generation impose sizable macroeconomic costs on Lebanon (Special Focus). The Lebanese electricity sector has been underperforming for decades with considerable socio-economic costs. The macroeconomic impact has been massive; accruing debt on investments in and transfers to Electricité du Liban's (EdL) amounts to 40 percent of Lebanon's gross public debt, while transfers have accounted for over half of the fiscal deficit. Going forward, transfers to EdL will be significantly lower on current oil prices. Some of the measures needed to improve EdL's financial situation are well known, such as increased investment, tariff reforms and corporatization of EdL. Political and confessional obstacles, however, have so far hindered any progress.

IX. Water-supply shortages in the region's most water-rich country (Special Focus). Despite the relative availability of water resources, the Lebanese suffer from serious shortages of water supply. Moreover, the cost of inaction in the water sector is estimated at about 1.8 percent of GDP or 2.8 percent of GDP if the cost of environmental degradation is included. The Government must urgently address priorities within the sector.

ix. إن الخلل الجذري في قطاع الكهرباء في لبنان يشكل عبأً ثقيلً على إقتصاد لبنان الكلي (تحليل مركز). إن قطاع الكهرباء في لبنان يعاني منذ عقود من سوء الإنتاجية تنجم عنه تكلفة إجتماعية وإقتصادية باهظة. إن آثار هذه الآفة على الإقتصاد الكلي مكلفة جداً، إذ ان الإستثمارات والتحويلات لمصلحة مؤسسة كهرباء لبنان (EDL) تشكل ٤٠ بالمئة من مجمل الدين العام، كما أن التحويلات الى هذه المؤسسة تشكل نصف عجز الخزينة. ستنخفض هذه التحويلات في المدى المنظور بشكل ملحوظ من جراء اسعارالنفط الحالية. إن بعض الحلول التي ستساهم بدعم الوضع المالي في مؤسسة كهرباء لبنان معروفة، مثل زيادة الإستثمار، وإصلاح نظام التعرفة، وتحويل المؤسسة الى شركة مساهمة. لكن الإعتبارات السياسية والمذهبية قد أدت حتى اليوم الى عرقلة أي تقدم على صعيد هذه الإصلاحات.

viii. شحاح المياه في بلد يتمتع بأعلى منسوب مياه في المنطقة (تحليل مركز). يعاني اللبنانيون من نقص حاد في إمدادات المياه، مع أنه يتمتع بمصادر مياه وافرة نسبياً. إن كلفة عدم التطرق الى إصلاح قطاع المياه يؤدي الى كلفة تقدر ب ١,٨ بالمئة من الناتج المحلي الإجمالي أو ٢,٨ بالمئة من الناتج المحلي الإجمالي، إذا ما أخذنا بعين الإعتبار الأثار البيئية المتردية. يترتب على الحكومة أن تباشر فوراً بمعالجة أولويات الإصلاح في هذا القطاع.

الملخص التنفيذي

i. ما زال لبنان متأثراً بالجمود السياسي الداخلي والاضطراب الإقليمي، خاصةً على امتداد حدوده مع سوريا. أما الشلل السياسي الذي يرمز إليه شغور الرئاسة منذ أيار/مايو ٢٠١٤ فلا يزال قائماً، في حين أن تدفق اللاجئين السوريين تباطأ بشكلٍ ملحوظ بعد أن فرضت الحكومة اللبنانية القيود على حدود لبنانَ البرّيةً. وبالرغم من القيود، بلغ عدد اللاجئين السوريين المسجلين لدى المفوضية السامية للأمم المتحدة لشؤون اللاجئين ٢٦ بالمئة من إجمالي سكان لبنان.

ii. سجل النشاط الاقتصادي تحسناً في النصف الثاني من العام ٢٠١٤. فقد أدّى كل من قوة الأداء الاقتصادي وانخفاض أسعار النفط إلى نمو في الناتج المحلي الإجمالي الحقيقي يقدر بنحو ٢ بالمئة في عام ٢٠١٤، مقارنة مع ٠,٩ بالمئة في عام ٢٠١٣[٢]، وذلك بسبب الزيادة في الطلب من قبل القطاع الخاص. كما أن تجدد استقرار الأوضاع الأمنية حتى هذا اليوم، وإطلاق مبادرة الحوار بين الأحزاب السياسية المعارضة، قد تؤثر بشكل إيجابي على ثقة المستهلكين والمستثمرين. كما من المتوقع أن إنخفاض أسعار النفط بشكل مستمر سوف يؤدي إلى تأثير إيجابي على الاقتصاد اللبناني. ونتيجة لذلك، من المقدّر أن يتسارع نمط نمو الناتج المحلي الإجمالي الحقيقي ليبلغ ٢,٥ بالمئة هذا العام.

iii. إجراءات تجميلية وغير المستدامة عوضاً عن تنفيذ السياسات اللازمة ساعدة في تحسين التوازن المالي في عام ٢٠١٤. من المقدر أن يكون العجز المالي الإجمالي قد انخفض بنسبة ٢,٣ نقطة مئوية ليبلغ ٧,٢ بالمئة من الناتج المحلي الإجمالي، وقد عاد الميزان الأولي إلى تسجيل فائض بعد عامين متواصلين من العجز. أما الزيادة في خدمة الدين المحلي فقد أدّت إلى ارتفاع نسبة الدين العام، وإن كان ذلك بمعدلِ أبطأ من العام الماضي، ليبلغ الدين العام نحو ١٤٥,٧ بالمئة منَ الناتج المحلي الإجمالي بحلول نهاية عام ٢٠١٤. أما في عام ٢٠١٥، فمن المتوقع أن تنخفض التحويلات المالية إلى مؤسسة كهرباء لبنان (EDL) بسبب انخفاض سعر النفط، لكن مقابل ذلك سوف ترتفع نسبة خدمة الدين نتيجةً لارتفاع أسعار الفائدة في الولايات المتحدة، ولن يؤدي ذلك إلى تغيير كبير في الوضع المالي.

iv. أدّى انخفاض نسبة الواردات إلى تحسن في الحساب الجاري. في العام ٢٠١٤، أدى الانخفاض في الوارداًت السلعية إلى تقليص العجز التجاري بنحو ٤,٤ نقطة مئوية، ليبلغ ٢٢,٢ بالمئة من الناتج المحلي الإجمالي، أي نسبة لا تزال تعتبر عالية. ومن المتوقع أن يستمر هذا الاتجاه الانحداري في العام ٢٠١٥ بسبب هبوط أسعار النفط وانخفاض سعر اليورو، مما قد يزيد من تضييق بنحو ٥,٥ نقطة مئوية. ونتيجة لذلك، بلغت الاحتياطيات الأجنبية الإجمالية (باستثناء الذهب) في المصرف المركزي ٣٢,٤ مليار دولار أميركي في نهاية العام ٢٠١٤ (أي ما يوازي ١١,٦ شهراً من السلع المستوردة).

v. كما أدّت الفجوة الإنتاجية الكبيرة، بالإضافة إلى انخفاض أسعار النفط، إلى تباطؤ في الأسعار. فقد تراجع معدل التضخم من ٢,٧ في المئة في عام ٢٠١٣ إلى ١,٩ في المئة عام ٢٠١٤، ومن المتوقع أن يبقى هذا المعدل منخفضاً على المدى المتوسط. هذا، بالإضافة إلى استقرار سعر الصرف، والفجوة الكبيرة في الإنتاج ساهما في دعم السياسة النقدية التوسعية، فقد ضخ المصرف المركزي ٨٠٠ مليون دولار أميركي في عام ٢٠١٤، ومن المتوقع أن يضخ مبلغاً إضافياً في العام ٢٠١٥، وذلك على شكل قروض مدعومة متجهة نحو القطاع العقاري بشكل خاص.

vi. ما زال الاقتصاد اللبناني معرضاً للصدمات الخارجية. فالحدود اللبنانية السورية مهددة بشكل حاد ومستمر من قبل الجهات الأصولية كتنظيم الدولة الإسلامية في العراق والشام وجبهة النصرة، التي تقوم بشن هجومات انطلاقاً من قواعدها في سوريا. إضافة إلى ذلك، هناك احتمال فرص المزيد من التشديدات من قبل المصرف الفيديرالي الأميركي، ممّا قد يجبر لبنان على الالتزام بالسياسة النقدية ذاتها وذلك للحفاظ على الهامش بين الفائدة المحلية والعالمية للودائع بالليرة اللبنانية والدولار الأميركي. وقد يؤدي ذلك إلى تداعيات سلبية في ما يخص القروض الموجهة إلى القطاع الخاص، وتوسيع خدمة الدين العام، بحيث القروض الجديدة سوف تخضع لفوائد أعلى وذلك بسبب إجمالي الاحتياجات المالية الضخمة.

vii. تشير البيانات أن لبنان لم يتأثر سلباً في ما يخص التجارة الدولية جراء الأزمة السورية (تحليل مركز). إن التحاليل التي أجريناها خلصت الى النتائج التالية: (١) لم تتأثر صادرات السلع والخدمات على المستوى الإجمالي، (٢) و مع أن الصادرات الى سوريا إنخفضت بعض الشيء من جرّاء تدني الطلب في الأسواق السورية، لكن بعض التجار اللبنانيين سارع الى التعويض عن حاجات السوق السورية بعد تدني الإنتاج في ذلك البلد، (٣) كما ساهم النازحون السوريون بشكل فاعل بدعم الصادرات الخدماتية اللبنانية.

[٢] حسب تقدير البنك الدولي.

RÉSUMÉ

i. **Le Liban continue d'être affecté par une impasse politique interne et par les événements qui secouent la région, notamment tout le long de la frontière avec la Syrie.** La paralysie politique est principalement due à la vacance présidentielle qui persiste depuis mai 2014. L'afflux des réfugiés syriens s'est cependant nettement ralenti depuis que le gouvernement a imposé des restrictions à l'entrée de ces derniers au Liban. Il n'en demeure pas moins que selon le HCR, les réfugiés syriens dans ce pays représentent 26 pour cent de sa population.

ii. **L'activité économique a repris dans la seconde moitié de 2014.** Une meilleure performance économique et une baisse des prix du pétrole ont poussé la croissance du PIB d'environ 2.0 pour cent en 2014, comparé à 0.9 pour cent en 2013[3], grâce à une demande privée. Une nouvelle amélioration des conditions de sécurité jusqu'à ce jour en 2015 et le lancement du dialogue entre les partis politiques sont susceptibles d'avoir un impact positif sur les consommateurs et les investisseurs. En outre, les prix du pétrole, toujours faibles, devraient avoir un impact net positif sur l'économie. En conséquence, le PIB cette année devrait encore accuser une croissance de 2.5 pour cent.

iii. **Ce sont des mesures de rabibochage non soutenables et non pas des actions politiques substantielles qui ont contribué à améliorer le solde budgétaire en 2014.** Nous estimons que le déficit budgétaire global a diminué de 2,3 points de pourcentage (pp) pour atteindre 7,2 pour cent du PIB. Le solde primaire est redevenu excédentaire, après deux ans de déficit. Une croissance du service de la dette intérieure a cependant aggravé la dette publique quoique à un rythme plus lent que l'année précédente, soit environ 145,7 pour cent du PIB à la fin 2014. En 2015, la réduction des transferts à l'Electricité du Liban (EdL) du fait de la chute des prix du pétrole devrait être compensée par une hausse du service de la dette due à la hausse des taux d'intérêt, aux Etats Unis, ce qui laisse la situation fiscale en grande partie inchangée.

iv. **La diminution des importations a provoqué une amélioration de la balance courante.** En 2014, une chute des produits importés a induit une baisse de 4,4 pp du déficit de la balance courante à un niveau qui restait quand même élevé, soit 22,2 pour cent du PIB. Cette tendance devrait se poursuivre en 2015, aidée par la chute des prix du pétrole et une dépréciation de l'euro, rétrécissant ainsi davantage le déficit prévu de 5,5 pp. Par voie de conséquence, les réserves en devises de la banque centrale ont atteint 32,4 milliards de dollars (l'équivalent de 11,6 mois d'importations de marchandises) à la fin de 2014.

v. **Un écart de production importante, en plus de la baisse des prix du pétrole a entraîné une décélération des prix.** L'inflation a chuté de 2,7 pour cent en 2013 à 1,9 pour cent en 2014 et devrait rester modérée à moyen terme. Ceci est en partie due à la stabilité des taux de change et un écart important entre la production actuelle et potentielle et demeure favorable à la poursuite de la politique monétaire expansionniste entreprise par la banque central (Banque du Liban; BdL); la BdL a injecté 800 millions de dollars dans l'économie en 2014, avec une injection supplémentaire prévue pour 2015, sous la forme de prêts bonifiés principalement destinés au secteur de l'immobilier.

vi. **L'économie du Liban continue d'être exposée aux chocs extérieurs.** La frontière avec la Syrie est toujours exposée à des dangers de plus en plus grandissants du fait des attaques coordonnées lancées par l'Etat islamique et Al-Nosra de leurs

[3] Selon l'estimation des Services de la Banque Mondiale.

bases en Syrie. En outre, du fait des perspectives d'un resserrement des taux directeurs de la Réserve Fédérale américaine cette année, le Liban serait tenu de suivre cette politique afin de maintenir la marge sur les dépôts en dollars et en Livre Libanaise. Ce resserrement aura un impact négatif sur les prêts au secteur privé et fera accroître le service de l'importante dette du Liban. Une nouvelle dette devra être contractée à des taux d'intérêt plus élevés, en raison du montant total des besoins bruts de financement.

vii. Compte tenu des données existantes, il semble que le commerce international du Liban n'a pas été impacté négativement au niveau agrégé par le conflit syrien (Focus spécial). Une analyse détaillée des données a débouché sur les principaux résultats suivants: (i) la guerre semble ne pas avoir affecté ni l'exportation des marchandises, ni celle des services au niveau global; (ii) alors que les exportateurs libanais en Syrie ont souffert d'une baisse de la demande sur le marché syrien, d'autres exportateurs libanais ont commencé à exporter vers la Syrie pour combler certaines lacunes au niveau de la production syrienne; et (ii) les réfugiés syriens au Liban ont donné une impulsion importante aux exportations de services libanais.

viii. L'inefficacité du secteur de l'électricité impose des coûts macro-économiques considérables au Liban (Focus spécial). Le secteur libanais de l'électricité est sous-performant depuis des décennies avec des coûts socio-économiques considérables. L'impact macro-économique a été massif; par exemple les transferts cumulés de l'Etat à l'EdL ainsi que leur financement représentent 40 pour cent de la dette publique brute du Liban, tandis que les transferts représentent depuis plusieurs années autour de la moitié du déficit budgétaire annuel. Pour l'avenir proche, les transferts à l'EdL seront sensiblement plus faibles compte tenu des prix actuels du pétrole. Certaines mesures nécessaires pour améliorer la situation financière de l'EdL sont bien connues, telles que l'augmentation des investissements, les réformes tarifaires et de la corporisation de la companie. Les obstacles politiques et confessionnels, ont cependant entravé jusqu'à présent tout progrès.

x. Des pénuries d'approvisionnement en eau dans le pays le plus riche en ressources hydrauliques de la région (Focus spécial). Malgré la richesse relative de leurs ressources hydrauliques, les Libanais souffrent de graves pénuries dans le domaine de l'approvisionnement en eau. En outre, le coût de l'inaction dans ce secteur est estimé à environ 1, 8 pour cent du PIB, où même 2,8 pour cent du PIB si le coût de dégradation de l'environnement est inclus. Le gouvernement doit s'attaquer de toute urgence aux priorités au sein du secteur hydraulique.

RECENT ECONOMIC AND POLICY DEVELOPMENTS

1. **After three years of mostly Syrian-crisis related economic malaise, stabilizing forces can be detected.** Due to the Syrian conflict, Lebanon's economy had to undergo fundamental changes since 2011. Traditionally reliant on capital inflows to finance consumption as well as drive specific sectors (i.e. tourism and real estate), this model has been heavily compromised by the regional turmoil that has inhibited foreign investors and consumers. Instead, the influx of refugees shifted market dynamics; while refugees' buying/investing power does not match that of the traditional foreign consumers/investors (i.e. GCC) in Lebanon, the loss has been partially compensated. In 2014, we see tentative signs that the country known for its resiliency in the face of massive external shocks has made good way in the rough transition between the two fundamentals.

2. **Renewed improvement in overall security conditions, the formation of government and the launch of dialogue between antagonistic political parties, helped to buoy consumer and investor sentiment.** A positive political and security environment has traditionally translated into an increase in economic activity (Figure 1). Such developments raise hope that security incidents can be contained and the political process can proceed with the election of a new president, a position vacant since May 2014. However, pending a resolution of the political impasse, governance of the country is in standstill with the Presidency, the executive and Parliament either vacant, or on *de minimis* mode. Furthermore, episodic security incidents persist; spillovers from the regional turmoil have been manifested by more frequent clashes along the Syrian border between Lebanese Armed Forces and militants (ISIS and Al Nusra), who traverse the border between the two countries. In addition, anxiety is growing over the delicate balance of power along the contiguous Syrian-Israeli-Lebanese border; in retaliation to a deadly Israeli airstrike against Hizbollah members in the Syrian province of Quneitra, which lies close to the Israeli border, on January 28th, Hezbollah targeted an Israeli military convoy in the Shebaa Farms killing two Israeli soldiers.

3. **The influx of Syrian refugees abates but they still account for over a quarter of Lebanon's pre-Syrian conflict population.** Measures

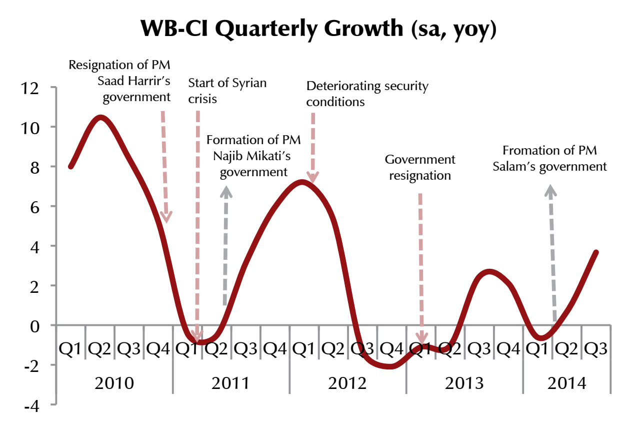

FIGURE 1. Economic trend frequently altered by political and security conditions.

Source: WB staff calculations based on a World Bank designed coincident indicator of the Lebanese economy (see Matta, S. (2014) for the methodology).

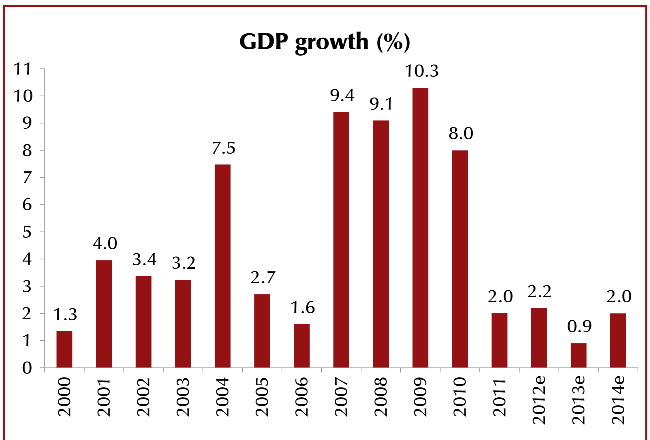

FIGURE 2. Real GDP growth is estimated to have picked up slightly in 2014.

Source: Lebanese authorities and WB staff calculations.

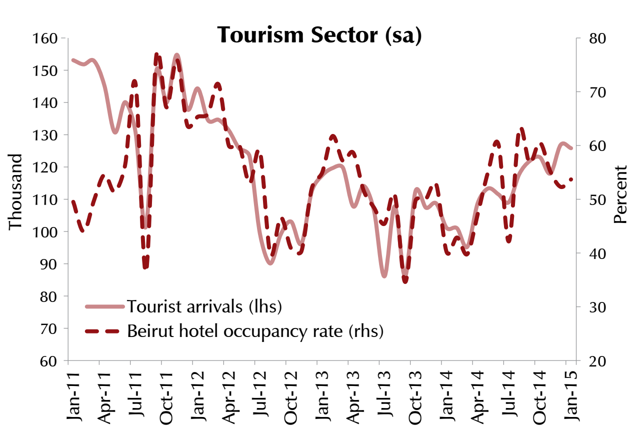

FIGURE 3. Tourism rebounds in Lebanon...

Source: Lebanese authorities.

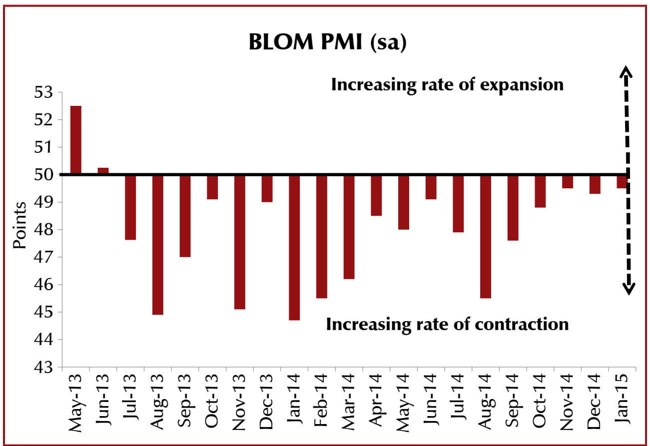

FIGURE 4. ... as the contraction in manufacturing decelerates

Source: BLOM Bank.

progressively introduced by the Government of Lebanon since October 2014 to limit the influx of Syrian refugee are becoming effective. Following a large increase in the number of Syrian refugees entering Lebanon in 2013 (i.e., 675,742 or 15 percent of the Lebanese population), the Lebanese government started imposing stricter conditions on the influx of refugees on October 2014, further tightening the enforcement of these new policies in January 2015. This has resulted in a sharp deceleration in the influx of refugees. According to the UNHCR, as of March 12, 2015, the number of Syrian refugees, both registered and awaiting registration, increased by 140,000 since June 2014. Notwithstanding the sharp deceleration in new entrants, Lebanon hosts a total of 1.17 million refugees which represents 26.7 percent of the total Lebanese population. This marks the highest refugee-to-population ratio compared to all other neighboring countries.

Output and Demand

4. **Improving security conditions led to a pickup in economic activity in the second half 2014.** Notwithstanding severe security lapses such as the joint ISIS-Al Nusra attacks in August 2014, an improvement in average security conditions in the second half of 2014 and a less acrimonious political environment laid fertile grounds for an upturn in economic activity. This, along with lower oil prices, pushed real GDP growth to an estimated 2.0 percent in 2014, compared to 0.9 percent in 2013 (Figure 2).[4] Traditional drivers of Lebanon's economy have exhibited either improved or stabilized performances. Of the former, the tourism sector regained impetus in 2014 with tourist arrivals increasing for the first time since 2011 by 6.3 percent, after falling 6.7 percent in 2013 (Figure 3). Iraqi nationals escaping deteriorating security conditions at home provided crucial support for the sector.[5] Mixed performance in the real estate sector, another traditional driver of the economy, points to stabilization; while cement deliveries declined by 5.4 percent, construction permits grew by 4.8 percent, following the latter's decline of 12 percent in 2013. In addition, increased activity in the agricultural sector can be discerned from 6.7 percent growth in borrowing from Kafalat[6] in 2014. The manufacturing sector has also been well placed to benefit from the decline in oil prices, a factor that helps explain a notable deceleration in the contraction of the BLOM purchasing managers'

[4] World Bank staff estimates based on our coincident economic indicator (for details, see Matta, S. (2014) "New Coincident and Leading Indicators for the Lebanese Economy," World Bank Policy Research Working Paper No. 6950) pending final GDP estimates from CAS for 2012 and 2013.

[5] According to BLOM bank, a 33 percent increase in Iraqi tourists was the main factor that drove a rise in Arab tourists, who continue representing the largest share of tourists to Lebanon (for details see BLOM (2015) "Lebanese Tourism Sector in 2014").

[6] Kafalat is a public entity that channels government subsidized loans to businesses.

BOX 1. Syria-Related Economic Activity in Lebanon: What the Data Does Not Tell

Amid a systemic weakness in the statistical system in Lebanon, measuring the economic impact and contribution of Syrian nationals on the economy is challenging but likely underestimated. The Syrian conflict and in particular the massive influx of refugees into Lebanon is likely leading to a structural break in the measurement of economic transactions. Economic activity with Syria and of Syrian nationals in Lebanon is likely under-reported in traditional data both on the production and expenditure sides of national accounts. Several factors could account for this under-estimation. For example, with the growth of the war economy in Syria, trading with neighboring countries is likely becoming more informal; similarly Syrian firms in Lebanon are, to a significant extent, also likely to operate informally due to their smaller size and being inhibited by registration rules that are less favorable to foreigners. On the consumer side, Syrian consumers are likely to have their final consumption subject to a much lower effective tax rate than the average Lebanese (or traditional tourist) consumer given their lower income level which tilts their consumption towards staple goods (mostly VAT exempt) or towards goods that do not or only partially enter the VAT net (subsistence food, purchase from small retailers that are below the VAT registration threshold).

index (PMI)[7] toward the last quarter in 2014, from 45.5 in August to 49.3 in December (Figure 4).

5. **From the demand side, improved security and lower oil prices boosted consumer sentiment, reinforcing private demand.** The ARA consumer confidence index[8] rose by 21 percent in 2014 compared to 2013 (Figure 5), reversing the negative trend in retail trade (Figure 6). Private demand is also supported by Syrian investment; as the Syrian turmoil endures, Syrians in Lebanon are gradually shifting their economic role from being mainly consumers reliant on handouts to becoming income earners, albeit for many, confined within the informal sector. This includes establishing micro and small businesses that sell goods (including those originating in Syria) at lower prices targeting the Syrian community (ILO, 2014[9])—see also Box 1 on issues related to the measurement of economic activity by Syrian refugees and residents. However, Lebanese businesses which are not able to compete at those prices are negatively impacted. The external sector was also a positive contributor to real GDP growth due to falling imports (as a ratio of GDP), helping to narrow the trade deficit in goods and services. Public investment and consumption, on the other hand, were more tempered in 2014 as the Ministry of Finance has provided more scrutiny on outlays.

Labor Markets

6. **Given their protracted presence, Syrian nationals have de facto become part of the labor market; this has generated significant negative distributional impacts among Lebanese.** With around half of the working age Syrian refugees economically active (ILO, 2014),[10] by end-2014 the labor supply in Lebanon is estimated to have

[7] The PMI is an indicator that is based on a monthly survey of business conditions in the Lebanese private sector. It is a composite index calculated as a weighted average of five individual sub-components: New Orders (30%), Output (25%), Employment (20%), Suppliers' Delivery Times (15%) and Stocks of Purchases (10%). A value of the PMI above 50.0 signals an improvement in business conditions from the previous month, while a drop in the PMI below the 50.0 threshold indicates a slowdown in business activity (BLOM Bank, 2013).

[8] ARA Marketing Research and Consultancy, a private consultancy firm, constructs and disseminates a consumer confidence index on a monthly basis. This Index is based on the following six sub-indices: current economic situation index, expected economic situation index, current personal income index, expected personal income index, current employment opportunities index and purchase of durables index. We calculate the 3-months moving average.

[9] International Labor Organization, 2014, *Assessment of the Impact of Syrian Refugees in Lebanon and Their Employment Profile.*

[10] The study surveyed the employment profile of refugees and the impact of their economic participation on the host communities' livelihoods. Data was collected from 400 households, which included a total of 2,004 individuals.

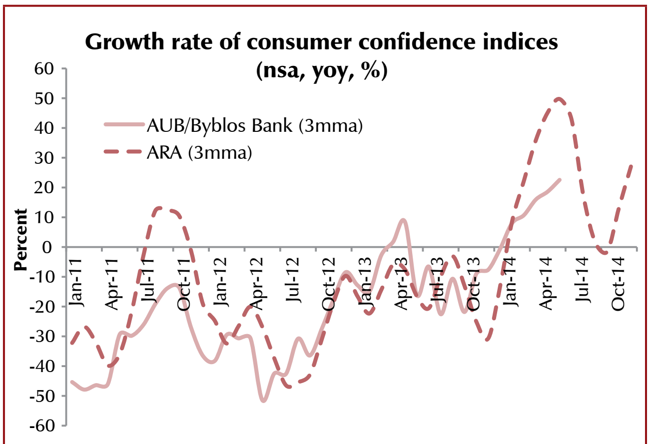

FIGURE 5. Rising consumer sentiment in 2014...

Source: ARA Marketing Research and Consultancy and BdL.

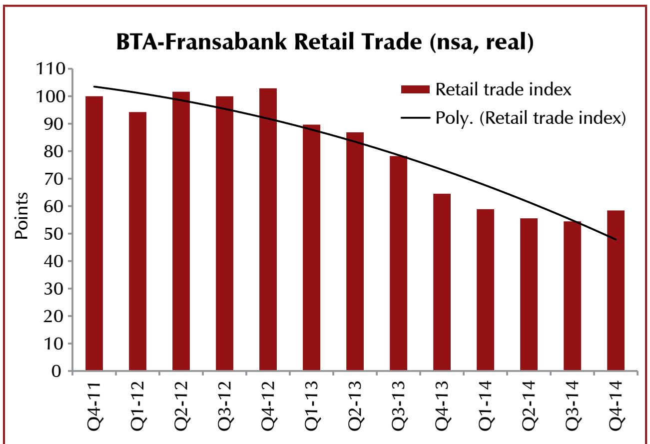

FIGURE 6. ... helped stabilize retail trade

Source: BTA-Fransabank.

expanded by 50 percent (IMF, 2014[11]). The majority of Syrian refugees are low- to semi-skilled workers, engaged primarily in construction, agriculture, and personal and domestic services, concentrated in the informal sector. While generating economic activity in Lebanon, the competition created[12] at times fuels social discontent and tensions between the refugee and host communities, but, considering the sheer number of refugees, these frictions have been remarkably muted. Lebanese employers and business owners, on the other hand, benefit from the availability of less costly labor (ILO, 2014). These findings are consistent with evidence of *de facto* (but rarely *de jure*) labor market inclusion witnessed in similar protracted refugee presence in host countries (e.g., World Bank, 2011[13]). They also confirm the simulations undertaken in the World Bank (2013)[14]-led report: namely that the Syrian conflict and the massive influx of refugees into Lebanon would generate both winners and losers among Lebanese (and refugees); those having good human or physical capital are not strongly impacted or even benefit (e.g., landlords or retail store owners in regions with high refugee influx), while those with limited such capital would be worse off (e.g., lower wages, less jobs).

7. **Lebanon's inability to generate sufficient jobs has acute socio-demographic implications.** Real estate, construction, finance and tourism have been the traditional drivers of economic activity.[15] Since these sectors either are not labor intensive, or attract lower skilled and cheaper foreign labor, growth observed in Lebanon does not adequately generate employment for Lebanese nationals. In fact, the long-run employment-growth elasticity is estimated to be 0.2 (World Bank, 2012[16]), much lower than an estimated MENA average of 0.5 (IMF, 2014). Furthermore, during the 2005–09 period, Lebanon created only 3,800 jobs per year (one for every six new entrants to the labor market), while some 22,000 new Lebanese entrants are expected each year until 2019 (excluding the Syrian refugees)—World Bank (2012). The unemployment rate in 2011, still yet unaffected by regional hostilities, stood at 11 percent, slightly exceeding the MENA average of 10 percent, and reflecting insufficient job opportunities. While no data exist yet, unemployment is estimated to have worsened

[11] IMF (2014), *Article IV Consultation and Selected Issues*, July, Washington DC.

[12] Syrian workers accept lower income and work for longer hours without social benefits, bidding down wages (ILO, 2014).

[13] World Bank (2011), "The Impacts of Refugees on Neighboring Countries: A Development Challenge," Background note for the 2011 World Development Report on Conflict and Development, Washington DC.

[14] World Bank (2013) "Lebanon: Economic and Social Impact Assessment of the Syrian Conflict", Washington DC.

[15] The real estate sector, in particular, has accounted for anywhere between 50 and 70 percent of total gross fixed capital formation since 1997.

[16] World Bank (2012), "Republic of Lebanon—Good Jobs Needed: The Role of Macro, Investment, Education, Labor and Social Protection Policies", December, Washington DC.

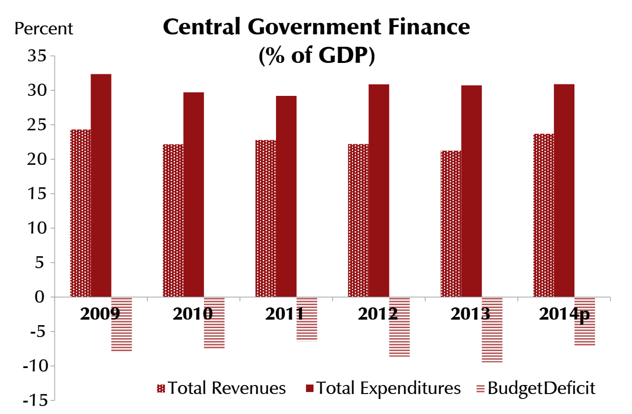

FIGURE 7. Fiscal deficit narrows in 2014...

Source: MoF and WB staff calculations.

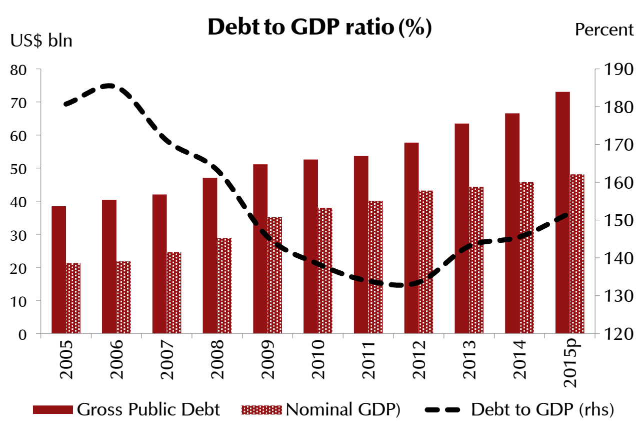

FIGURE 8. ... debt- to-GDP, however, rises

Source: BdL, CAS and WB staff calculations.

significantly since then (World Bank, 2013). This structural labor market weakness is changing the socio-demographic fabric of the country: educated Lebanese have sought employment in countries with a demand for high skilled labor, creating a large diaspora; meanwhile, non-Lebanese dominate the unskilled labor market, pricing out the nationals.

Fiscal Policy

8. **One-off, technical and unsustainable measures rather than policy actions helped improve the fiscal balance in 2014.** The overall fiscal deficit narrowed to an estimated 7.2 percent of GDP, a decline of 2.3 pp of GDP from a year earlier (Figure 7). This recovery was led by the primary (i.e., excluding interest payments) balance, which improved by 2.7 pp of GDP, swinging back into surplus for the first time since 2011 (Table 3). The primary fiscal improvement was driven almost entirely by improved revenue collection, especially non-tax revenues, with total revenues increasing by an estimated 2.4 pp to reach 23.7 percent of GDP. The quality of this improvement, however, was weak as these reflected primarily a one-off measure—a surge in transfers from the telecom sector related to the collection of past telecom transfer arrears—that will revert and is therefore not sustainable. On the expenditures side, while primary spending fell by 0.3 pp from 2013 to 2014 (as a ratio of GDP), the underlying spending was significantly higher than actually recorded because of a delay in transferring a significant amount (about 1 percent of GDP) in telecom revenues. These have been collected on behalf of municipalities by the central government (CG), which recorded it on the revenue side of the CG budget in 2014. When dispensed, these transfers will be recorded on the expenditure side of the CG budget, drastically reverting the technical fiscal improvement recorded in 2014.

9. **Debt-to-GDP rose for the third consecutive year as Lebanon's cost of financing significantly exceeds its income growth rate which, in turn, significantly outstrips the benefit of a primary fiscal surplus.** Total public debt continued rising in 2014, albeit at a slower rate, reaching 145.7 percent of GDP (US$66.6 bln) by end-2014, compared to 143.1 percent of GDP at end-2013, and 133.5 percent of GDP at end-2012 (Figure 8) (Table 3). The increase in 2014 was driven by a rise in domestic debt service, which more than offset the primary budget surplus. The former was the result of a large positive gap between the (average effective) real interest rate at which Lebanon borrows (3.3 percent in 2014) and the rate at which the economy's capacity to generate income and repay that debt is growing (estimated 2.0 percent in 2014). This trend, based on current policies and real GDP growth rates, is already unsustainable; it is expected to notably worsen once global dollar interest rates start normalizing (a pace which is expected to start with a tightening of policy rates by the U.S. Federal Reserve Board later

in 2015). The government continues to primarily finance the fiscal deficit by issuing Treasury bills and Eurobonds. In February 2015, the government raised US$ 2.2 billion through two Eurobond issuances.[17] The stock of debt outstanding remains mostly internal,[18] whereby, as of end-2014, 75.5 percent of gross public debt is held by commercial banks and the central bank, Banque du Liban (BdL).

10. **Longstanding structural bottlenecks in public finance remain and continue to impair progress towards the development of the country.** Since 2005, budgets have not been ratified by parliament, while fiscal accounts have not been officially closed since 1993. Spending has been conducted largely through treasury advances and ad-hoc measures in times of pressures. This leaves fiscal policy without an anchor. Even prior to 2005, fiscal policy has been missing a medium-term perspective. The lack of proper oversight and extra-budgetary entities that receive significant government funding help entrench a culture of non-transparency in fiscal affairs.

External Sector

11. **Lebanon's current account balance improved in 2014 but remains structurally weak.** The current account deficit is estimated to have improved by 4.4 pp of GDP from 2013 to 2014, reaching 22.2 percent of GDP[19]; a deficit that remains among the largest in the world, exposing the country to significant refinancing risks. The relative improvement was driven by a fall in imports from 75.4 percent of GDP in 2013 to 73.5 percent in 2014, due largely to a 13.6 percent decline in capital imports. Simultaneously, services led a 0.5 pp increase in total exports to reach an estimated 46.2 percent of GDP in 2014. Merchandize exports, however, contracted by 15 percent led by an 88 percent fall in energy exports and an 11 percent contraction in capital exports. The former reflects both, lower oil prices and fluctuations in volume, which declined by 90 percent in 2014,[20] while the latter mirrors a similar retrenchment in capital imports. Lebanon mostly exports services (e.g., tourism, financial services, advertising) to the region, and as such, the Syrian and Iraqi turmoil have caused significant market loss. Remittances in 2014 increased by 0.6 pp to 6.1 percent of GDP.

12. **Lebanon is structurally and heavily dependent on capital inflows to finance its current account deficit.**[21] Since 2012, leading sectors towards which the majority of foreign capital gravitated have suffered a significant decline in activity, becoming a less attractive destination for FDI (e.g., real estate, tourism). Net FDI in 2013 (the latest available full-year data) declined by 60 percent to US$973 billion, equivalent to 2.2 percent of GDP, compared to an average of 9.5 percent of GDP for the pre-crisis period of 2000-2010. We estimate a slight increase in 2014 to 2.7 percent of GDP. The presence of Syrian refugees, however, has partially compensated for this loss of inflows; the longer the Syrians are displaced from their country, the more likely they will seek more medium-term adjustments to their financial situation. This involves investments and other inflows to their host country, in the form of FDI and short-term flows. Additionally, international aid targeting Syrian refugees provides

[17] Despite it being one of the largest issues by the government and occurring during a period of regional turmoil, it was oversubscribed. The issue consisted of two tranches: US$ 800 million for a maturity of 10 years at 6.2 percent and, significantly, US$ 1.4 billion for a 15-year maturity at 6.65 percent.

[18] Internal debt is defined as the sum of Treasury bills and Eurobonds held by commercial banks plus the T-bills held by BdL.

[19] BoP revisions by authorities are frequent and substantial. For example, in the previous BoP issue, the current account deficit had hovered around 8 percent of GDP since 2012.

[20] Energy imports and exports have fluctuated heavily during the past few years, no doubt affected by Lebanon being used as a conduit to Syria. In 2012, Lebanon began importing fuel bound to Syria as Syria lost access to its own oil fields, increasing volumes of petroleum imports and exports by 18 percent and 2460 percent, respectively. Regarding this as support for the Syrian regime, anti-Syrian regime groups in Lebanon began attacking trucks carrying fuel to Syria; this curtailed the volume of imported petroleum products to Lebanon by 15 percent in 2013, while exports continued growing by 287 percent. In 2014, volumes imported rose by only 2 percent, while those exported fell drastically by 90 percent, reflecting that Lebanon is being used less as a conduit to the Syrian market.

[21] The current account deficit has averaged 16.3 percent of GDP during the past ten years.

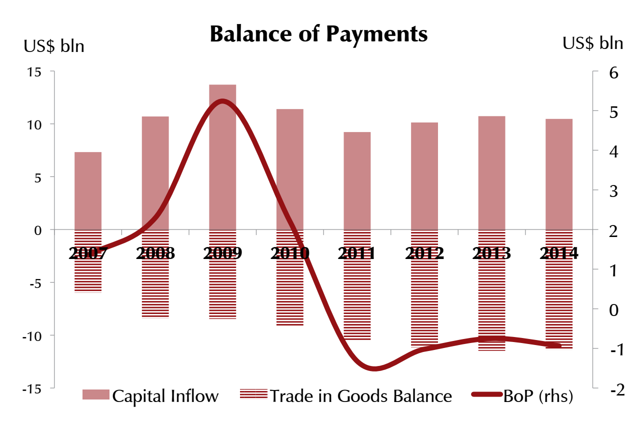

FIGURE 9. Robust capital inflows...

Source: BdL and WB staff calculations.

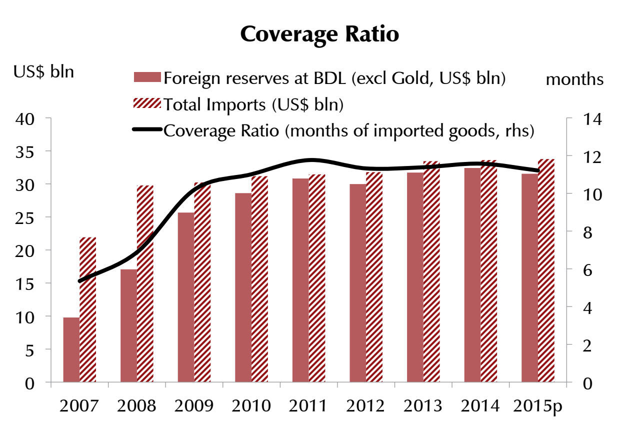

FIGURE 10. ... helped BDL to increase its stock of foreign reserves

Source: BdL, Lebanese Customs and WB staff calculations

additional support to the balance of payments.[22] Deposit transfers and international aid helped short-term capital flow to almost double in 2014 to an estimated US$ 3 billion. This is also reinforced by the wide spread between domestic and international interest rates that reached an average of 421 basis points by mid-2014.[23] As a result, total capital inflows have held up at $15.8 billion in 2014, albeit declining by 2.4 percent from 2013, leading to a 24 percent expansion in the balance of payments deficit (Figure 9).

13. **Accumulation of gross foreign reserves by the BdL remains robust.** The stock of gross international reserves (excluding gold) at the central bank continued rising as it reached US$ 32.4 billion (8.5 percent of GDP) by end-2014, increasing by 2.2 percent compared to end-2013 (Figure 10). In terms of months of imported goods, the coverage ratio increased from 11.4 percent in 2013 to 11.6 percent in 2014. We project that by end-2015 reserves would remain around 11 percent of imports.

[22] Inflows to Lebanon have also included international aid targeting Syrian refugees, albeit via various international organizations and not through the government, which continues to appeal for assistance. A United Nations Development Program (UNDP) study assesses the impact on the Lebanese economy of international humanitarian aid delivered via UN agencies to the Syrian refugees in Lebanon. It estimates that this aid, estimated at over a billion dollars between 2012 and 2014, has a multiplier effect that added 1.3 pp to 2014 GDP growth.

[23] This is the interest rate differential between the 3-month Lebanese T-bill and the 3-month LIBOR.

Monetary Policy, Banking and Prices

14. **Amid lackluster economic activity and falling oil prices, Lebanon's inflation rate reached its lowest level in a decade.** Headline CPI inflation averaged 1.9 percent in 2014, undergoing a 0.8 pp decline relative to 2013 (Figure 11).[24] The declining inflation rate in 2014 reflects a combination of tapering one-off computational issues in 2013[25], a continued negative output gap and favorable external prices (mostly declining global energy and food prices, and also an appreciating effective exchange rate given the country's peg to the dollar). Moreover, with the influx of Syrian refugees in 2014 sharply lower than in 2013, supply side factors that previously pushed inflation upwards (e.g., the sudden and massive increase in housing demand), is likely to have waned off, albeit with a lag given the likely pent up in demand. The slowdown in inflation has

[24] Inflation data in Lebanon have been problematic. Due to interruption in official CPI inflation data (Central Administration of Statistics (CAS) did not collect any price data between January and May 2013), we used the CRI CPI index instead, which does not include rents and only collects price data for the Greater Beirut area. Even prior to the interruption, the Central Administration of Statistics' CPI inflation did not reflect periodic measurement of rent inflation. In December 2013, CAS released a rebased inflation time series using a new methodology to better capture rents. This, however, is insufficient to capture year-on-year inflation, forcing us to use a combination of CRI and CAS inflation data.

[25] In September 2012, public sector wage increases were enacted retrospectively to the beginning of 2012.

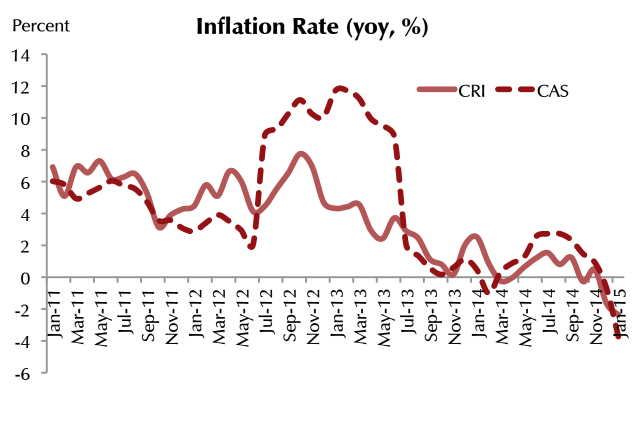

FIGURE 11. Inflation abated in 2014.

Source: CRI and CAS

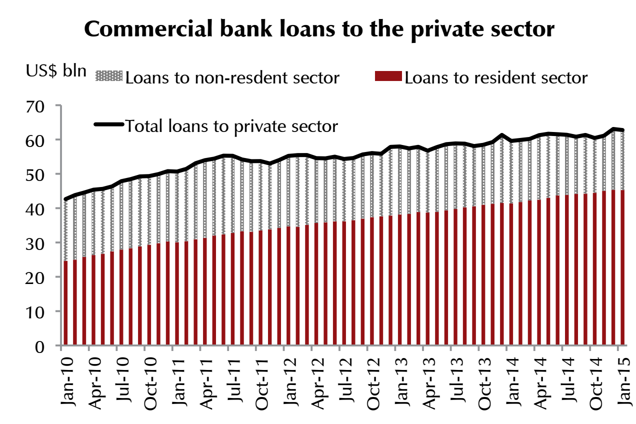

FIGURE 12. Lending to the private sector grew, partly due to BdL's stimulus package.

Source: BdL and WB staff calculations

translated into tepid growth in money supply (M3, including non-resident deposits), which registered 6 percent in 2014, compared to 9 percent in 2013.

15. **Exchange rate stability, a sizable, cumulative and contemporaneous output gap and low and decelerating inflation prompted the central bank (BdL) to continue its expansionary monetary policy.** The dollarization rate—a key gauge of confidence in Lebanon—registered 65.7 percent in 2014, largely unchanged from 2013. Real GDP growth, however, continues to lag behind the 1993-2014 average rate of 4.4 percent. As a result, by 2014 a sizable output gap has opened up; 2014 real GDP is 10 percent lower than what it would have been had real GDP grown at 4.4 percent annually since 2011, while the cumulative output gap for the period 2011-2014 is equivalent to 6.6 percent of the cumulative 2011-2014 real GDPs. These, along with low inflation, allowed the BdL to launch a stimulus package in 2014 for the second year running[26], amounting to US$ 800 million, in the form of subsidized loans. These packages have been vital for stabilizing the real estate sector by boosting domestic demand after demand from Lebanese expatriates and foreign buyers dropped sharply. In addition, BdL introduced in 2014 a plan to guarantee up to 75 percent of the value of a commercial bank's equity investment in startups or venture capital funds, targeting Lebanon's knowledge economy. In return, banks receive a seven-year interest-free credit from the central bank that can be then invested in Treasury Bonds. BdL earmarked up to US$ 400 million for financing this scheme.

16. **Lending to the resident private sector has expanded briskly in 2014.** The stock of commercial banks' credit to the private sector increased by only 2.1 percent in 2014, compared to 6.4 percent in 2013 (Figure 12). However this conceals diverging dynamics; while claims on non-residents have contracted by 9.1 percent by end-2014, compared to end-2013, those on residents have grown by 9.3 percent. Part of the increased credit to residents is related to the BdL's stimulus packages described above. Nonetheless, lending remains below the 2008-2012 average rate of 16.5 percent, reflecting reduced economic activity and elevated risk aversion from the volatile security environment.

17. **The BdL continues to expand its macroprudential tool kit to limit risks in the financial sector.** Enthusiastic uptake of BdL packages is manifested by brisk growth in credit to resident private sector, as described earlier. In response, BdL has introduced measures to help contain the over-leveraging of the financial sector. In 2014, the central bank called on financial institutions to conduct regular impairment tests based on international standards. To limit leverage risks on the consumer side and the

[26] The last stimulus package was launched in January 2013 in the amount of US$ 1.46 billion and proved successful. While the real estate sector benefited the most from the subsidized loans, start-ups and venture capital (relatively nascent in Lebanon) are also responding favorably to BdL's subsidized loans. The BdL is expected to continue acting as a lender of last resort subject to exchange rate stability.

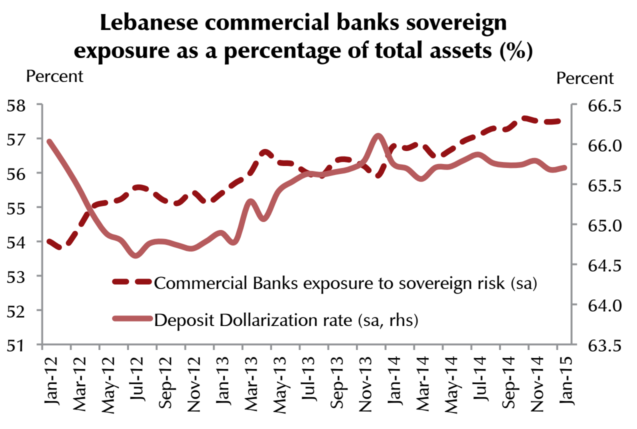

FIGURE 13. Lebanese banks' sovereign debt exposure increased in 2014...

Source: BdL and WB staff calculations

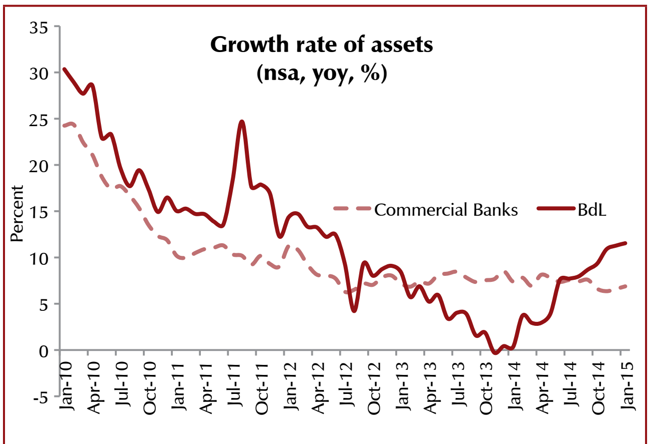

FIGURE 14. ... as did commercial banks' assets.

Source: BdL and WB staff calculations

fallout impact on banks, BdL also instructed banks to require a minimum down-payment of 25 percent for any car or housing loan and to limit the value of the loan such that the monthly installment does not exceeding 45 percent of family income (35 percent for a housing loan). Additionally, banks are required to build general reserves against their preforming commercial loans portfolio, and to build collective provisions against performing retail loans and retail loans 30 days in arrears.

Financial Markets

18. **Lebanon's banking sector is liquid, profitable and well regulated, but highly exposed to the public sector.** Banks are well capitalized and resilient owing to prudent investments and conservative regulation by BdL and the Banking Control Commission. In 2013 (latest available), the Tier One capital-to-risk-weighted-asset ratio was 12.2 percent, which was double what is required by Basel III. The liquid asset-to-total deposit ratio[27], an indicator of short-term liquidity, stood at 68.8 by end-January 2015, compared to 66.3 at end-December 2013. Moreover, banks' profits continue rising while non-performing loans (NPLs) are low and return on equity is in the double digits.[28] Nonetheless, commercial banks are highly exposed to sovereign credit risk as they are a large investor in public debt.[29] In fact, Lebanese banks' sovereign debt exposure[30] increased slightly from 55.8 percent end-2013 to 57.5 percent by January 2015 (Figure 13). In an attempt toward diversification, banks expanded regionally, an effort that has been severely compromised by the recent regional upheaval.

19. **Deposit growth decelerates.** Commercial banks' balance sheet continued to grow, rising by 6.6 percent (yoy) in 2014, compared to 8.5 percent in 2013 (Figure 14). Deposits constitute the principal funding source for commercial banks, with the deposit-to-total liabilities ratio at 86.9 percent by end-January 2015, compared to 87.7 end-December 2013. These deposits are primarily driven by non-resident private sector deposits, whose growth slowed to 6.4 percent in 2014, compared to 18.2 percent a year earlier (Figure 15). Resident private sector deposit growth also regressed, but much less dramatically from 6.8 percent in 2013 to 5.9 percent in 2014. Non-resident deposit growth has been a vital factor in the stability of the banking sector, and

27 Liquid assets consist of commercial banks' deposits with central bank, Treasury Bills in LL held by commercial banks and Eurobonds held by commercial banks.

28 There has been some deterioration in profitability and NPL ratios since the beginning of the Syrian crisis in 2011.

29 Interest income, as obtained from BilanBanques, amounted to, respectively 64.09 percent, 65.31 percent and 64.06 percent of total consolidated banks' income in 2010, 2011 and 2012.

30 The sovereign debt exposure is computed as a ratio of commercial banks' aggregate investment in Treasury bills, Eurobonds and deposits at BdL relative to total assets.

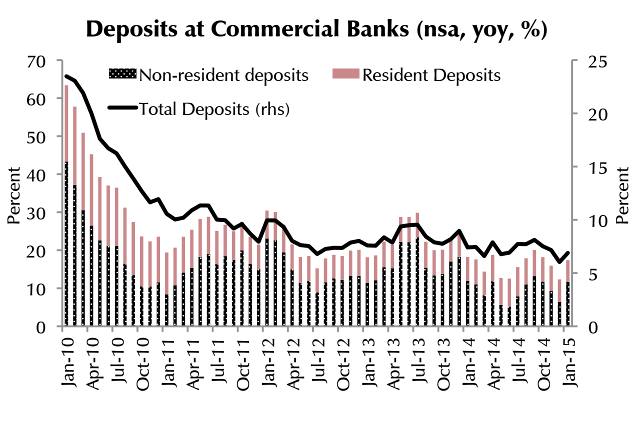

FIGURE 15. Deposits at commercial banks continued to rise steadily in 2014.

Source: BdL and WB staff calculations

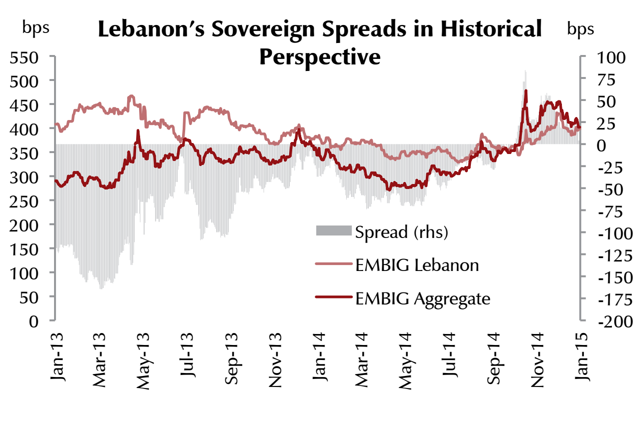

FIGURE 16. Falling risk premium on Lebanese Eurobonds translated into narrowing spreads.

Source: JP Morgan and WB staff calculations

in fact the whole economy. Attracted by interest rate spreads[31] it has been expanding at an average of 18 percent annually since 1993. However, a deceleration over this period signals the unsustainability of such a high rate; non-resident deposit growth declined from an annual average of 21.5 percent for the period 1993-2002, to 16.2 percent during 2003-2011. Since 2011, the regional turmoil has further exacerbated this trend to an average growth of 10.3 percent. Nonetheless, this remains sufficient to meet financing needs.[32] Furthermore, these deposits, which are largely sourced from Lebanese expatriates, are resilient to shocks due to the diaspora's familiarity with the country's political and security volatilities. Additionally, the BdL has demonstrated its readiness to be the ultimate guarantor of the financial sector via its large foreign exchange reserves, intermediation between antagonistic parties and good crisis management overall.[33]

20. **Spreads on Lebanese Eurobonds narrow in 2014, evening turning negative.** This likely reflects an improvement in the overall security and political situation along with a worsening of macroeconomic fundamentals in key emerging market economies (Figure 16). Beirut Stock Exchange (BSE) BLOM Index declined by 3 percent during the period December 2013 to February 2015, while market capitalization rose by 6.6 percent to reach US$ 11.8 billion, equivalent to 25.7 percent of 2014 GDP. On the other hand, average trading value rose by a much dramatic 88 percent in 2014.

[31] The main interest rates that matter in this arrangement are the international dollar rate, a local rate on dollar deposits and a local rate on LBP deposits. A spread between the local and international dollar rates attracts deposits in dollar, while a spread between LBP and local dollar rates encourages deposits in local currency. Nonetheless, like much of the country, Lebanon's banking system is highly dollarized (65.5 percent dollarization rate).

[32] According to IMF 2014 *Article IV Consultation*, July 2014, a deposit growth rate of about 8 percent would cover the economy's financing needs while keeping reserves high.

[33] For example, in 2011 the US accused the Lebanese Canadian Bank of money laundry, which caused a rattle in the Lebanese financial sector. BdL immediately declared that it has sufficient funds to back up the bank, rapidly negotiated a takeover by Societe Generale de Banque au Liban, and eventually agreed on a settlement with the US government.

PROSPECTS

21. **While the Lebanese economy is gradually adapting to the negative spillovers from the regional turmoil, these are expected to continue holding it back.** A key assumption underlying projections for the Lebanese economy regards the Syrian conflict and its spillovers. Current World Bank staff projections no longer assume that the end of the Syrian war occurs within the projection period of 2015-2017, but instead assume that current conditions hold, i.e., containment of the spillovers continues but does not prevent occasional security events from occurring. Relative to our Fall 2014 issue of the *Lebanon Economic Monitor*, real GDP growth for 2014 is estimated to be 0.5 pp higher at 2 percent, reflecting a pickup in economic activity in the second half of the year as well as positive effects of declining oil prices. These same positive factors will also generate a stronger-than-expected momentum for the first half of 2015, leading to an upward revision of our growth projections for 2015 by 0.5 pp to 2.5 percent. The return to potential output growth critically hinges on a resolution of the conflict in Syria as well as a marked improvement in the security and political situations in Lebanon.

22. **Absent significant structural reforms on either revenue or spending, Lebanon's public finances are projected to remain structurally weak and deteriorating.** In 2015, reduced transfers to Electricité du Liban from falling oil prices along with continued tax administrative scrutiny will achieve a projected 1.2 percent of GDP in primary savings to be partially offset by 1.5 percent of GDP in lower revenues due to the unsustainability of the one-off revenue measures in 2014. As a result, the primary balance will remain in surplus, but once again, not due to sustainable policy measures. A projected increase in debt servicing due to the pass through from higher global interest rates (i.e., US. Federal Reserve Board-related) will leave the overall fiscal position largely unchanged in 2015 compared to 2014. Assuming political paralysis eases by 2016, we expect some limited public sector wage increases as well as higher transfers to municipalities, raising current expenditures. This, in addition to larger debt servicing, will lead to a deterioration in the overall fiscal deficit.

23. **The conduct of monetary policy is expected to become more challenging due to conflicting objectives.** BdL, whose primary objective is to maintain the stability of the peg to the dollar, is expected to become confronted during 2015 with challenges to its expansionary policies (secondary objective) from a number of factors. First, expected normalization of global interest rates will ultimately require domestic interest rates to increase in order to maintain exchange rate stability. Second, the enthusiastic response to BdL initiatives (subsidized loans) has helped boost economic activity but, after several years of such lending, more attention will need to be paid to the issue of household leveraging and repayment capacity. The expanded use of macroprudential tools shows that BdL is vigilant to these risks. Hence, while monetary policy has been one of the few effective countercyclical policy tools during the ongoing period of sluggish growth, it will likely become less potent economic stimulant going forward.

24. **For short- and medium-term reasons, it is imperative and urgent for policy-makers to address Lebanon's longstanding and worsening structural bottlenecks.** Lebanon continues to be beset by structural bottlenecks, including in infrastructure such as electricity, water, transportation and telecommunications. These bottlenecks are becoming even more binding as shown by a worsening of Lebanon's international ranking among key investment climate assessments (e.g., the World

Bank's Doing Business indicators or the World Economic Forum's Global Competitiveness Index). While, the rise in demand from the Syrian refugees has exacerbated these problems, a deficit in service delivery pre-existed the influx. Hence, any reform and/or investment in those areas will go towards alleviating this pre-exiting deficit, once the refugees return to their homes (World Bank et al., 2013). In the meantime, while refugees are present, the much needed reforms would go a long way in improving living conditions and standards of both Lebanese and refugee communities, mitigating tensions among communities. In the short-term, given the protracted impact that the Syrian conflict has had and is projected to continue having for some time on the Lebanese economy, the option of delaying further any policy decision and action is ultimately hurting the economy and its citizens as growth remains weak, debt is again accumulating rapidly, jobs are not created, corruption becomes even more prevalent, and services deteriorate at an accelerating pace. Policy inaction is not just putting on hold Lebanon's development, it is dragging it backwards.

SPECIAL FOCUS

I. THE TRADE IMPACT OF THE SYRIAN CONFLICT ON LEBANON

25. *We explore the trade effect of the Syrian war on Lebanon up until the second half of 2014. A dissection of the data reveals that, so far, the war seems to have affected neither merchandise nor services exports at the aggregate level. At the same time the relative stability of merchandise imports is likely a result of increased demand due to refugee inflow being offset by higher transit costs through Syria as well as depressed Syrian production. A gravity-type trade model confirms these findings, suggesting also that Lebanese trade seems to have been less negatively affected by the Syrian war than other Syria's neighbors. An empirical analysis using micro level exporter data substantiates this finding. While Lebanese exporters to Syria have suffered from a drop in demand in the Syrian market (but less so than their Jordanian counterparts), other Lebanese exporters have started to export to Syria to fill the gap in Syrian production. Further econometric analysis suggests that Syrian refugees in Lebanon provide important impetus to Lebanese services exports.*

Introduction

26. **The devastating civil war in Syria is arguably one of the major civil conflicts in recent times.** The conflict started with protests in March 2011 and soon after escalated to a violent internal war with no end in sight to this date. The conflict has by the end of 2014 caused well in excess of 150,000 fatalities, 6 million internally displaced people (UN) and 3 million out of country refugees to (UNHCR). Beyond the human tragedy, the conflict has disrupted the functioning of the economy in many ways. It has destroyed infrastructure, prevented children from going to school, closed factories and deterred investments and trade.

27. **The economic effects of the war extend beyond the country's borders affecting also the neighboring countries with trade being one of the main channels through which the effects of the crisis are transmitted.** For example, the demand for goods and services in Syria is likely to have fallen thus affecting the many exporters to Syria in neighboring countries. Moreover to the extent that Syria has become harder to cross, the war may have made trade through Syria more difficult. At the same time, producers in neighboring countries may have replaced Syrian producers in Syria and in other markets as their productive assets in Syria were destroyed

28. **In a recent report we have set out to explore the trade effect of the Syrian war on Lebanon, which is the neighboring country with strongest links to Syria.**[34] Syria forms Lebanon's largest border and a main economic conduit to the outside world. Organic social and political ties further elevate the relationship between the two countries. Moreover, a Syrian military presence and penetrating political influence over Lebanon lasted about 30 years until 2005, 15 years of which Syria had the dominant say in its neighbor's domestic and foreign affairs. More recently, Lebanon has been experiencing perturbing security and political spillovers from its neighbor's turmoil.

29. **We use a variety of analytical instruments to find that the Syrian war has so far had a mixed impact on Lebanese trade.** The analysis provides a snapshot on the impact up until the second half of

[34] Calì, Massimiliano, Wissam Harake, Fadi Hassan and Clemens Struck (2014). "The Trade Impact of the Syrian conflict on Lebanon", World Bank report.

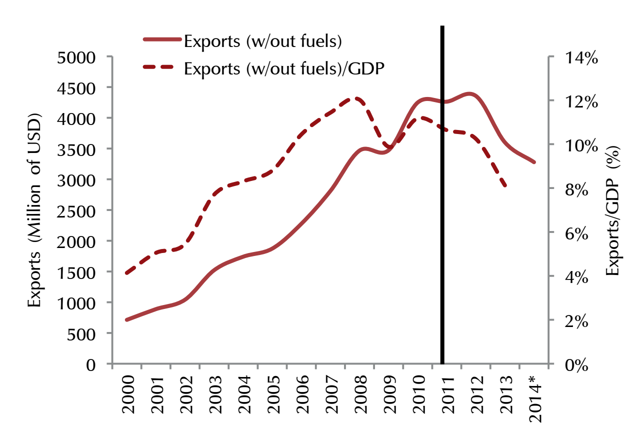

FIGURE 17. Lebanese merchandise exports, 2000-2014.

** Export data estimated on the basis of Lebanese customs data up to October 2014. Source: Lebanese Customs, World Development Indicators and World Bank staff estimates.*

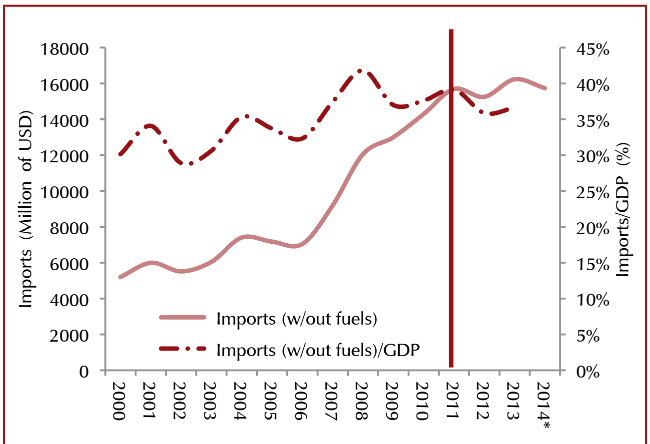

FIGURE 18. Lebanese merchandise imports, 2000-2014.

** Export data estimated on the basis of Lebanese customs data up to October 2014. Source: Lebanese Customs, World Development Indicators and World Bank staff estimates.*

2014. As the Syrian war is evolving and firms and traders are adjusting to the new context, updating such analysis will be important to keep a realistic perspective on the economic impact of the war.

Descriptive evidence on merchandise trade

30. **The war does not seem to have affected so far merchandise exports at the aggregated level.** This is despite a marked decline since 2012, arresting the robust growth of the previous decade (Figure 17).[35] Overall, exports represent a small portion of GDP (~10 percent), and this share has been declining since 2008. The growth in goods' export dropped already in 2011, following a similar drop during the 2008-09 global financial crisis, but remained positive for the year. Since 2012, however, growth has turned negative. However our analysis suggests that this negative export performance seems unrelated to the Syrian war. The swings in exports of the recent years have been mainly driven by pearls and precious stones and other metals, which are subject to fluctuations in international demand. These exports are not destined to Syria, nor do they transit through Syria.

31. **Lebanese merchandise imports experienced a slowdown in growth after 2011 vis-à-vis the previous decade** (Figure 18). However, unlike exports, imports continued to grow through 2013 with a small drop expected in 2014, while the merchandise imports-GDP ratio (which is 4 times as high as the merchandise export-GDP ratio) continued decreasing after 2011. The relative stability of import values over time is likely to be the product of two competing forces related to the war. On the one hand, the refugee inflow into Lebanon has pushed imports upwards due to the increased demand for consumption and capital goods. On the other hand, the increased trade costs due to the war have hampered the ability of Lebanese traders to import via land, thus decreasing the import propensity of the economy.

32. **Syria is also an important transit country for Lebanese trade as a sizable share of this trade travels through Syria.** For example, a third of non-fuel Lebanese exports went to neighboring countries in the Middle East, which would be ideally reached overland, and thus, transiting through Syria.[36] Despite Lebanon's export and import bundles being relatively diversified given its level of

[35] Exports and imports for 2014 have been estimated on the basis of Lebanese custom data through October 2014. This data has been complemented with estimates for November and December 2014 obtained by applying the percentage change in exports between the period August-October 2014 and August-October 2013 to the export data for November and December 2013.

[36] The most important export destinations among those countries are United Arab Emirates, Saudi Arabia, Jordan, Iraq, Iran, Kuwait, Oman, Qatar, Bahrain and Turkey, hereafter referred to as the "affected countries".

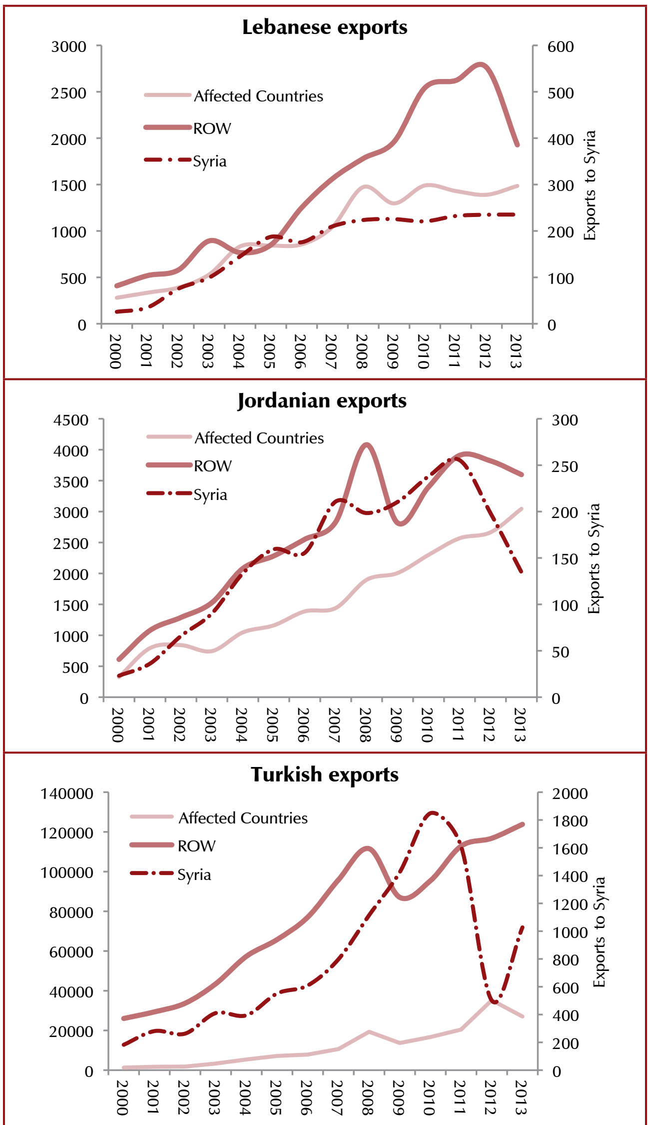

FIGURE 19. Syria's neighbors exports by destination (USD mln)

Source: Authors' elaboration on WITS

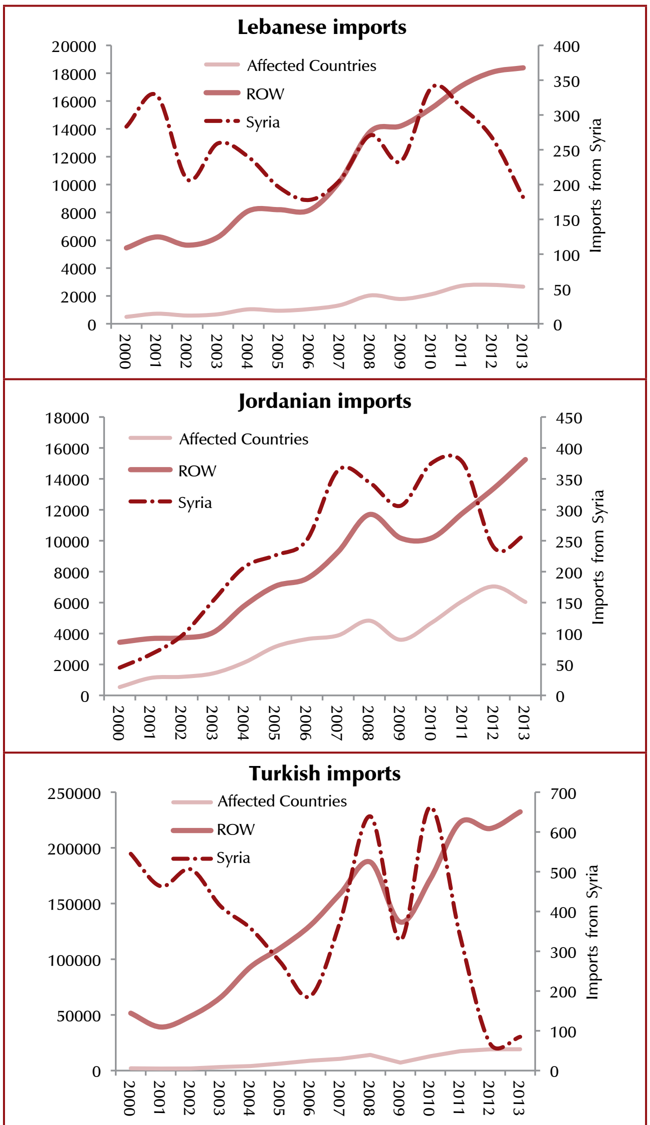

FIGURE 20. Syria's neighbors imports by destination (USD mln)

Source: Authors' elaboration on WITS

GDP (e.g., exporters reach 110 destinations, well above the average for countries of similar size), more than 20 percent of total exports and about 6 percent of total imports transit by land through Syria, mainly to and from the Arab markets.[37]

33. **The data suggest that overland trade (both imports and exports) has been severely disrupted by the Syrian war.** The figures show a re-direction of both exports and imports away from Masnaa and Abboudieh especially between 2012 and 2013. On the other hand, Arida and Kaa have been marginal border-posts even before the Syrian war. The main beneficiary of this re-direction has been Port of Beirut (PoB), whose share in total export value has jumped to 44 percent in 2013 (from 28 percent in 2012), while the share of imports rose to 71 percent (from 66 percent in 2012).[38]

34. **Despite this re-direction of trade, the trend in Lebanese exports to both Syria and the affected countries remained the same as the pre-war period** (Figure 19). For import the trend to the affected countries was also the same while imports from Syria dropped dramatically (Figure 20). Syria has continued to be a destination market for Lebanon throughout the war. There has been a lot of churning

[37] These trade flows clear customs in the border cities of Masnaa, by far the most important border for trade through Syria, Abboudieh, Arida, or Kaa.

[38] In the case of exports, the jump in the PoB's share is also explained by the reduction in exports via air, following the drop in exports of valuable jewellery and precious stone.

in the Syrian demand for Lebanese products with the demand dropping for certain goods but picking up for others as Syrian production was undermined. Overall Syrian demand for Lebanese products seems to have withstood the crisis. And that seems to have been the case also for the affected countries. The fall in overland exports post-2011 suggests that these markets have been served increasingly via, air and more importantly, via sea.

35. **On the other hand, the collapse in Syrian production has led to a dramatic decline in Lebanese imports from Syria, which almost halved between 2010 and 2013** (Figure 20). Other Syrian neighboring countries, Jordan and Turkey also experienced a reduction in imports from Syria although to different degrees. Turkish imports almost came to a halt (from close to $700 million in 2011 to less than $100 million in 2012), while Jordanian imports fell by 30 percent. Anecdotal evidence gathered through our interviews suggests that the Turkish import collapse may have also been a by-product of the fact that some Syrian firms managed to relocate to Turkey during war to serve its market and Syria itself.

The impact on merchandise exports

36. **A gravity-type trade analysis using 6-digit HS export and import data for all Middle Eastern countries plus Turkey confirms these trends.[39]** It shows an overall negative, but not particularly robust, effect of the Syrian war on neighboring countries' trade flows. This comes mainly from the loss of the Syrian market. This effect for Lebanon is smaller in magnitude and less robust than for Turkey and Jordan.

37. **An empirical analysis using micro level exporter data allows us to investigate this evidence further and provides further confirmation of the greater ability of Lebanese exporters to withstand the fallout of the Syrian crisis vis-à-vis other neighboring exporters.** The data is gathered in the World Bank exporters' dynamics database (Cebeci et al., 2012) and includes the universe of all custom-level transactions of exports, comprising the firm identifier, the value in US$, the destination and the HS 6 digit sector.[40] The results of the data analysis (in Table 1) suggest that on average an exporter of goods to Syria before the war lost US$ 90,000 in exports to Syria by 2012, around a quarter of the average pre-crisis export level to Syria. While this effect is significant, it is much smaller than the effect for Jordanian exporters, who on average experienced a drop of US$ 340,000, equivalent to three quarter of their average exports to Syria in 2010. This effect of the Syrian conflict has been heterogeneous across exporters. It has mainly affected exporters highly exposed to the Syrian market, while it has not had a significant impact on relatively marginal exporters.

38. **On the other hand, the analysis suggests that the Syrian war has also generated opportunities for Lebanese exporters to replace the loss of Syrian production in the Syrian market.** Many firms which were not exporting to Syria in 2010 did start to export by 2012. On average, exports to Syria increased by US$ 125,000 per firm relative to the exports of the same firm to other destinations, and relative to the exports of the other exporters once netting out the drop in Syrian exports for the original exporters in 2010. This replacement effect seems to be large enough to compensate for the negative impact of the war on the pre-crisis exporters to Syria. Indeed, for the average exporter, the change in exports to Syria in the period 2010-12 has been positive overall although not significant. The replacement effect has been much smaller for Jordanian exporters, who have been less able to replace Syrian production in Syria than their Lebanese counterparts.

39. **The micro analysis also reveals the magnitude of the impact of the war on exporters using Syria as a transit country.** On average, a firm that was exporting to the affected countries in 2010 experienced by 2012 a drop of $68,000 in its exports

[39] The gravity model measures the difference in imports and exports of Lebanon (or any other country) between the war and the pre-war period vis-à-vis that of all other countries in the sample, controlling for all time invariant characteristics of each origin and destination country.

[40] Cebeci, T., Fernandes, A., Freund, C. and M. Pierola (2012). *Exporter Dynamics Database*, World Bank Policy Research Working Paper 6229.

TABLE 1. Difference in difference: export to Syria, 2010-12

	(1)	(2)	(3)	(4)	(5)	(6)
Country	LBN	LBN	LBN	JOR	JOR	JO R
Dep. Var.	?Export	?Export	?Export	?Export	?Export	?Export
Exp. to Syria (2010)	-89,599***	-55,846		-339,669***	-454,608*	
	(-2.636)	(-1.128)		(-3.173)	(-1.648)	
Above median initial exp to Syria			-179,190***			-659,399***
			(-2.856)			(-3.371)
Below median initial exp to Syria			-8			-18,256
			(-0.001)			(-0.336)
Firm FE	NO	Y ES	NO	NO	Y ES	NO
Observations	43,298	43,298	43,298	23,334	23,334	23,334
	(7)	(8)	(9)	(10)	(11)	(12)
Countr y	LBN	LBN	LBN	JOR	JOR	JO R
Dep. Var.	?Export	?Export	?Export	?Export	?Export	?Export
Exp. to Syria (2010)	-212,096***	-163,529**		-311,789***	-460,329*	
	(-4.084)	(-2.547)		(-3.164)	(-1.662)	
All exp. to Syria	125,287***	107,683***	43,913	-29,130	5,722	-116,093**
	(2.826)	(2.633)	(1.370)	(-0.600)	(0.226)	(-2.114)
Firm FE	NO	Y ES	NO	NO	Y ES	NO
Observations	43,298	43,298	43,298	23,334	23,334	23,334

*Note: t-values in brackets. *, **, *** indicate significance at 10 percent, 5 percent and 1 percent level respectively.*
Dependent variable is the absolute difference (in US$) in firm-level export flow to a specific destination between 2012 and 2010.
Source: Cali et al (2014).

to these countries relative to the other exports of the same firm as well as to the other exports of firms that were not exporting to Syria in 2010. On the other hand the transit effect is not significant for the Jordanian firms, confirming that Syria is not as crucial a transit country for Jordan as it is for Lebanon.

40. **The Syrian war has not affected all merchandise sectors equally.** Our analysis with customs data reveals that the Syrian war had a positive effect on Lebanese exporters to Syria in the beverages and tobacco sector. This result suggests an important replacement effect operating in these sectors. For example exports of wheat to Syria increased 14-fold between 2011 and 2013. On the other hand, the crisis had a particularly negative impact on exporters of manufactured goods, a result common to Jordanian exporters as well, and of mineral fuels. The transit effect was damaging especially for machinery and transport equipment, exporters of crude materials, mineral fuels and food and live animals.

41. **The war had a more negative impact on Jordanian exporters via the loss of the Syrian market, especially for food and live animals, beverages and tobacco and manufactured goods.** The negative effect of the war on manufactures for both Lebanese and Jordanian exporters suggest that these products have a high elasticity of demand with respect to the war, somewhat differently from food exports, where replacement effects of Syrian production are also at play.

Services trade

42. **Services dominate the Lebanese export sectors, being 4-5 times larger than goods' exports.** Thus, much of the overall impact of the civil war on trade depends on the effects on services. Unfortunately the data quality does not allow a neat

assessment of these effects. In particular data from different sources paint a different trend in services exports in the 2011-13 period (Figure 21). According to the Banque du Liban (BdL) data, exports of services declined dramatically both in 2012 and 2013. The opposite is true according to UNCTAD data (though the data is available only until 2012), while the IMF records a flat trend.[41] While it is difficult to gauge which of the figures is more likely to be accurate (if any at all in fact), an analysis of domestic services turnover and of foreign investments data provides suggestive evidence that the declining trend in services exports derived from BdL data may be less accurate than the stable or increasing trend derived from the IMF or UNCTAD data.

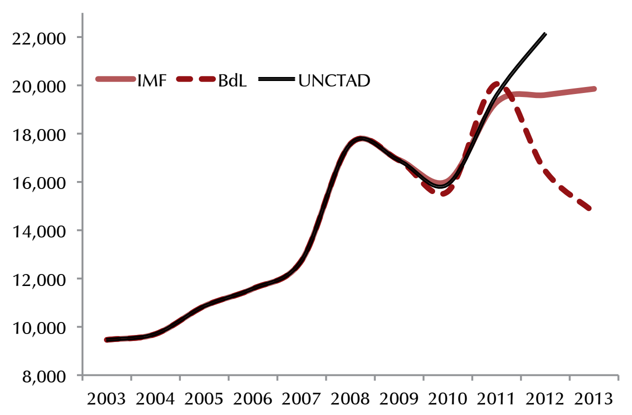

FIGURE 21. A matter of points of views: Lebanon's services exports (US$ million).

** Source: Banque du Liban online BoP data, UNCTAD online statistics and IMF (2014)*

43. **One services export where the different data sources seem to agree on is tourism.** Both the BdL data on travel exports and the turnover data on hotels and restaurants - the closest proxy to tourism in the domestic classification – show a slowing growth trend after 2010 and eventually a drop after 2012. Travel exports declined by 19 percent between 2011 and 2013 while the drop of turnover on hotels and restaurants by 2 percent between 2012 and 2013 and by 5 percent between the first quarters of 2013 and of 2014. The decline of the tourism sector is also confirmed by the data on loans to small and medium enterprises provided by Kalafat, the largest such credit scheme in Lebanon.

44. **Visitors from all parts of the world have steadily declined since 2010.** Excluding Syrian and Lebanese nationals, the number of visitors into Lebanon declined by 23 percent between 2010 and 2011 and further 15 percent in 2012 and 2 percent in 2013. The first four months of 2014 witnessed a further decline of 16 percent vis-à-vis the same period in 2014. To a large extent, this reflects bans, formal or informal, that several countries have placed on travel to Lebanon due to security incidents and political disagreements, arguably mostly the result of infighting in Syria spilling over to Lebanon. Tourists are no longer crossing by land through Syria (the only land access to Lebanon aside from Israel), and Arab countries (excluding Syria) represented 53% of tourists in 2010. Visitors from other regions of the world have also declined, most notably Asia and Europe, as the Syrian crisis has increased the general public perception of danger in the Middle East in non-Arab countries.

45. **While tourism receipts have suffered the fallout of the Syrian war, the other services sectors have mostly proven resilient to the war.** Contrary to most economies in the region, Lebanon's services exports do not rely exclusively on exports of transport and tourism, but rather expand to cover modern sectors like financial, real estate and business services. Overall, non-tourism services exports have grown unabatedly during the Syrian war. Even the real estate sector that contracted in 2010-12 most likely due to the spillovers of the Syrian conflict, rebounded in 2013. And the financial sector has remained resilient throughout the crisis despite some loss of profitability of the Syrian affiliates of major Lebanese banks. Other business services including legal, accounting, engineering, architecture, advertising and media services, have continued to be resilient despite the challenging economic environment relying on well-developed skills and budding services infrastructure. Some

[41] The source of the difference is not entirely clear. One issue is that the data undergoes periodic adjustments to reflect corrections made once the raw data from the banking system are examined and these adjustments can be relatively large. For example services exports in 2012 were initially estimated by the BdL at US$ 22 billion, a figure which is currently reported by UNCTAD. However the data was subsequently revised downwards by the BdL to US$20 billion and only recently, with the release of the last semester of BoP data, revised further downwards to the current US$ 16 billion.

business services firms may have even replaced Syrian firms in providing services especially in the regional markets. The resilience of this services sector is important given their prominent role in the economy: domestic turnover in 2013 was around $ 3.6 billion, i.e. larger than the entire merchandise exports.

The impact of refugees' inflows on trade

46. **Another major influence of the Syrian war on Lebanese trade worked through the refugees' inflows.** Strong linkages made Lebanon a main refuge for Syrians escaping the violence that has afflicted their nation. Relative to its population, Lebanon hosts more Syrian refugees than any other country, including Jordan and Turkey. As of March 18, 2015, UNHCR registered 1,176,054 Syrian refugees in Lebanon, with more awaiting registration, bringing the total persons of concern to 1,187,407. This is equivalent to almost 27 percent of the population, and it does not take into account the non registered refugees, making it one of the most dramatic relative increases in population over a short period of time.

47. **Syrian refugees might encourage trade across the border as their movement between the two countries has increased significantly.** This dynamic might be especially relevant as Syria lost much of its productive capacity across all sectors. In addition, inflows can be reinforced by the presence of refugees, whether due to international aid, or Syrian remittances from the GCC countries or bank deposit transfers to Lebanon.

48. **We utilize UNHCR data for the number of Syrian refugees in Lebanon and estimate their impact on critical BoP variables:**

i. exports of services;
ii. imports of food, allowing us to not only gauge the refugee-induced increase but also whether it also involved a shift in quality and price,
iii. imports of capital goods, to examine whether a larger population encourages local manufacturing;
iv. imports of consumption goods, to again detect changes, if any, in quantity and quality;
v. inflows of remittances, which would capture remittances sent by expatriate Syrians, specifically those based in the GCC countries, to their displaced families in Lebanon;

49. **As control variables, we use the World Bank coincident indicator to proxy for economic activity in Lebanon, and the number of Syrian refugees in other neighboring countries (Jordan, Turkey and Iraq) to proxy for the security conditions in Syria.**[42] All variables are in a monthly frequency. We use vector autoregressions (VARs) methodology and generate the impulse response functions (IRFs), of which the following yield the most interesting results:

50. **Our analysis shows that exports of services react positively and significantly to a positive shock in the number of Syrian refugees.** We also find that a one percent increase in registered refugees boosts exports of services by 1.6 percent after two months.[43] The result suggests that Syrian refugees act as linkages that encourage Lebanese exports of services to Syria, possibly in substitution of services that were once produced in Syria. Our simulations also illustrate that capital imports react negatively and significantly to a positive shock in refugees. A large portion of Lebanon's capital imports are produced in the region and transported via Syria, especially Damascus. Proximately dictates that many of the Syrian refugees in Lebanon come from Damascus and the surrounding areas. As such, an increase in Syrian refugees to Lebanon, but not to

[42] As national accounts in Lebanon are only available with a significant time lag, World Bank staff have developed a Coincident Indicator to better assess recent economic developments (see Matta, S. (2014) "New Coincident and Leading Indicators for the Lebanese Economy," World Bank Policy Research Working Paper No. 6950).

[43] We perform OLS estimations using a structure based on the VAR specification, which incorporates lags for each variable, as a starting point for our estimations, keeping in mind the need to limit the number of regressors in order to increase the degrees of freedom. The result is robust to the use of different time lags suggesting that most of the refugees' effects on services exports are displayed in the short-run and are persistent over time.

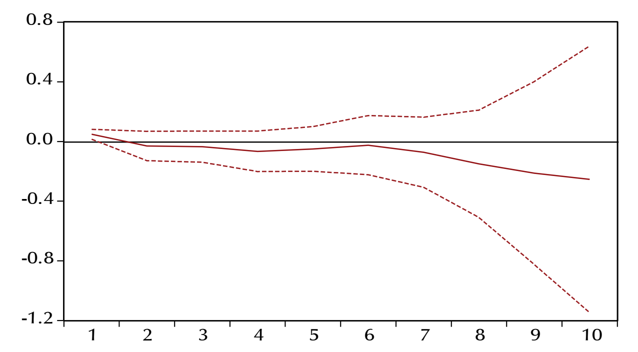

FIGURE 22. The response of exports of services to a shock in Syrian refugees.

Source: WB staff calculations.

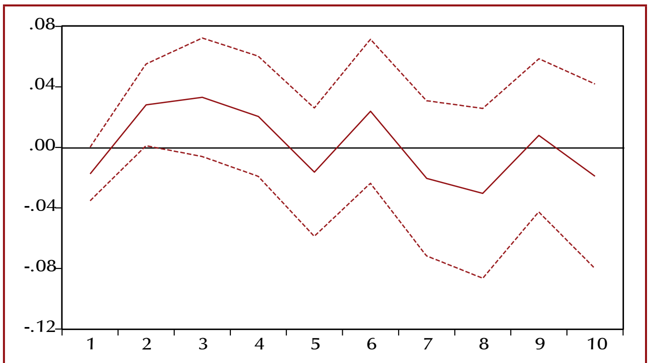

FIGURE 23. The response of capital imports to a shock in Syrian refugees.

Source: WB staff calculations.

neighboring countries, could be signaling localized security deterioration around Damascus, negatively impacting capital imports.

51. **The low quality of the data has limited our ability to obtain stronger results.** Data caveats include strong divergence from other sources as well as frequent and large revisions of historical values.

Way forward and policy implications

52. **There are a few early signs of recovery for the tradable sector negatively affected by the Syrian war although it is far too early to assess whether they will turn into a sustainable recovery of these sectors.** However the deterioration of security conditions may quickly reverse these early signs. The trade prospects for Lebanon will crucially depend on a number of factors mainly linked to the Syrian war and to its regional spillovers: domestic security conditions, the evolution of the war in Syria and of the incipient war in Iraq; and the economic and social sustainability of the Syrian refugees. A close and continuous monitoring of these trends is necessary to prevent possible negative fallout of the Syrian civil conflict on the neighboring economies and beyond.

53. **On the basis of the results of the analysis we can develop some tentative policy implications.** First it would be important to provide support to affected firms and workers. Firms heavily reliant on the Syrian and Middle Eastern markets have been particularly affected by the conflict, suggesting that help to diversify towards other markets would be appropriate. In the same vein, supporting workers laid off by firms negatively affected by the conflict would be important not only for the welfare of the workers and their households but also to ensure the domestic stability of the country. Indeed Lebanon fits the profile of a fragile country, whose stability is particularly vulnerable to adverse economic shocks (Calì, 2015).[44]

54. **Given the disruptions to overland trade generated by the conflict, it seems appropriate to assist with the development of alternative transport arrangements.** While the existing spare capacity of the Port of Beirut has allowed avoiding delays from the additional traffic, the potential for increasing merchandise trade hinges mainly on port infrastructures at least until the security situation in Syria allow for the unhindered passage of goods.

55. **The analysis also shows that registered Syrian refugees provide important impetus to Lebanese services exports.** This suggests that a more formal integration of the refugees is important to maximize the benefit of their presence on the Lebanese economy. Given the sheer size of the refugees' stock in the country, external support would be needed for their integration.

[44] Calì, M. (2015). "Trading away from conflict: Using trade to increase resilience in fragile states", Directions in Development, Washington DC: The World Bank.

II. CHALLENGES IN THE LEBANESE ENERGY SECTOR

The Lebanese electricity sector has been underperforming and in crisis for several decades, requiring urgent action to avoid further deterioration of the quality of electricity delivery. The macroeconomic impact has been massive; accruing debt on investments in and transfers to Electricité du Liban's (EdL) amounts to 40 percent of Lebanon's gross public debt and is escalating rapidly as transfers now account for over half of the fiscal deficit. Some of the measures needed to improve EdL's financial situation are well known, such as increased investment, tariff reforms and corporatization of EdL. Political and confessional obstacles, however, have so far hindered any progress.

The current status of the Lebanese electricity sector

56. **The Lebanese electricity sector has been underperforming and in crisis for several decades.** Despite having a system peak demand of 3,165 MW, only 2,019 MW of capacity were available in 2013, meaning that there was a generation shortage of 36 percent of the peak demand. The daily supply of electricity averages 17 hours a day and the electricity losses are far away from best practices, with an estimated 15 percent for technical losses and 25 percent for non-technical losses.

57. **Urgent action is needed to avoid further deterioration of the quality of electricity delivery.** In a "do nothing scenario" in which the sector remains as is from 2013 to 2018, the generation shortage would increase to 50 percent of peak demand by 2018– from 36 percent in 2013. In addition, the daily supply of electricity would decreased to 12 hours a day in 2018 – from 17 hours in 2013.

58. **There are strong inequalities emanating from the current underperformance of the sector.** The origins of these inequalities include the fact that EdL consumers who are not billed are being cross-subsidized by taxpayers and other paying customers. Furthermore, consumers who suffer from electricity blackouts are faced with higher cost alternatives (e.g., private generator). Another source of inequality is electricity rationing which is highly pro-rich (Table 1); poorer regions go without public electricity for up to 12 hours every day, while richer ones such as Beirut are only subject to 3 hours of daily blackouts. Despite this major constraint on daily life and livelihood, government efforts are more prone to help equalize confessional polity as opposed to need-based/ pro-poor service delivery.

59. **Private generators are widely used both by households and firms.** The unreliability of the power supply has forced 92 percent of households link up to private generators, which have become a prosperous business with revenues estimated at US$ 1.7 billion or 3.7 percent of 2014 GDP. The electricity bill for each household is estimated to be as high as US$ 1,290 annually, of which two-thirds go to private generation. As far as firms are concerned, 91 percent of them own or share a power generator. Outside Beirut, power generators provide over 50 percent of firms' electricity consumption, rising higher in more remote regions; in Nabatieh, for example, private power generators supply 69 percent of the region's needs.

60. **The electricity sector suffers from being politicized.** The poor quality of service delivered in the electricity sector can be attributed to corruption, mismanagement, political rivalries, often reflecting confessional lines, and constant contention where workers and service providers are protected by their respective political leaders and are thus only accountable to them. Indeed the electricity sector is just one example of confessional polity in Lebanon.

Macroeconomic consequences of a power sector in crisis

61. **The financial unsustainability of the electricity sector and its poor performance affect Lebanon's macroeconomic stability and diminish its economic growth potential.** Fiscal transfers to the vertically integrated public utility EdL are the cause of an important part of the country's public debt. Accruing debt on investments in and transfers to EdL amounts to 40 percent of Lebanon's gross public debt and is escalating rapidly as transfers now account for over half of the fiscal deficit. Transfers to EdL have averaged 2.3 percent of GDP from 1992 to 2013 (Figure 24) and have been steadily increasing over time. As a result, during the 2006-2013 period, transfers to EdL averaged 4.4 percent of GDP per year, representing 55 percent of the country's fiscal deficit during those years. Since 2012 they have exceeded $2 billion per year. As the overall fiscal balance has been in deficit since 1992, transfers to EdL were effectively paid through borrowing. Using the rolling average effective interest rate on public debt since 1992 to price that borrowing cost, one finds that the cumulative cost of EdL transfers from 1992 to 2013 is a staggering 55.4 percent of 2013 GDP. With Lebanon's public debt-to-GDP ratio at 143.1 percent by end-2013, almost 40 percent of Lebanon's total public debt can be attributed to transfers to EdL. Alternatively, Lebanon's debt-to-GDP ratio would have been 87.8 percent instead of 143.1 percent by end 2013 if EdL had not been loss making.

62. **Firms face poor electricity service delivery, with significant regional variation, and incur large losses as a result.** Firms in Lebanon have to wait 56 days to obtain electricity connection upon submission of their application, compared to 13 days in Jordan and 19 days in Morocco. Once connected, firms receive very poor service. They experience over 50 power outages per month of an average duration of 5.2 hours, which is about 8.7 hours per day. Businesses as a result are compelled to use private generators, costing an average of 6 percent of sales.

63. **The poor quality of electricity supply hurts economic activity.** Development and cost efficient investment in energy systems has a proven correlation to GDP growth. When electricity supply experiences frequent interruptions or is prohibitively expensive, economic growth tends to slow down or even contract. Lebanon scores as the second worst country in the world in terms of quality of electricity in the 2014-15 World Economic Forum's Global Competitiveness Index. Similarly, according to the World Bank's 2013/14 Enterprise Survey, 75 percent of Lebanese firms identify electricity as a major constraint to business operations and competitiveness, and 11% of them identify it as the third most severe constraint on firms' ability to run their operations and grow (after political instability and weak investment climate). Moreover, according to the enterprise survey, electricity ranks as the most binding constraint to doing business in Lebanon. Informal firms also identify electricity and corruption

TABLE 2. Hours of supply by region

REGION	2009	2010	2011	2012	2013	2014
Beirut area	21.2	21.3	21.0	20.9	20.7	20.9
Mount Lebanon	18.2	18.4	17.1	13.1	15.5	16.2
South	15.8	16.1	15.2	11.6	12.6	13.2
Bekaa	17.2	17.9	15.9	12.6	13.3	14.5
North	18.4	18.5	17.1	13.9	14.1	14.5

Source: EdL

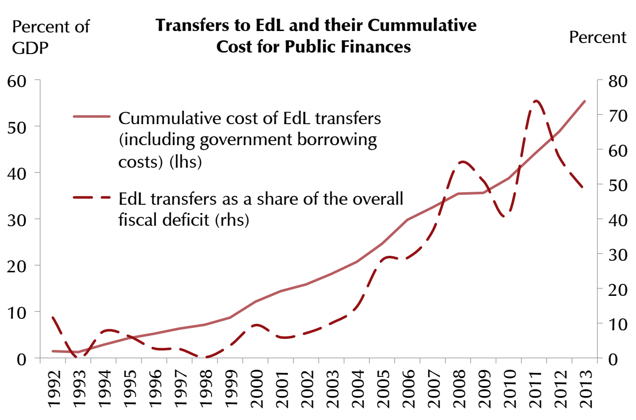

FIGURE 24. Treasury transfers to EdL.

Source: Ministry of Finance and World Bank staff calculations

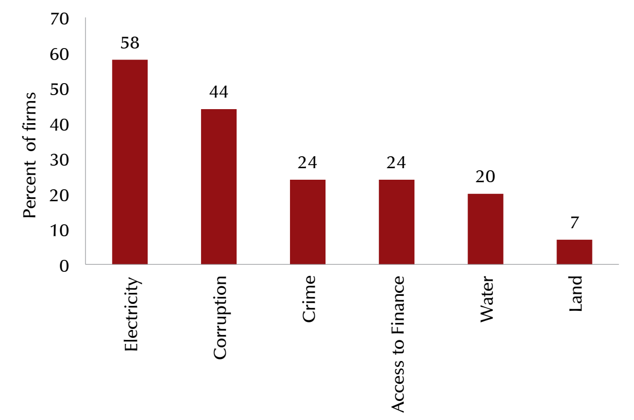

FIGURE 25. Constraints to growth among informal firms.

Source: World Bank staff calculations from Lebanon Enterprise Survey – Informal Sector 2013/14.

as the most severe constraints to their operation and growth. The Enterprise Survey also states that over 58 percent of informal firms report that the electricity supply is a major or severe constraint on their ability to run their operations and grow (Figure 25). The poor supply of electricity is particularly problematic for informal firms engaged in small manufacturing activities. For instance, about 76 percent of bakeries cite electricity as a major or severe constraint. Other constraints do not appear to disproportionately affect some sectors over others.

Priority investments and reforms of the 2010 Electricity Sector Policy Paper

64. **The Government of Lebanon endorsed a Policy Paper for the Electricity Sector (PPES) in June 2010.** This paper outlines policy and a US$ 6.5 billion envelope of investments aimed at increasing the level and quality of electricity supply, managing demand growth, decreasing the average cost of electricity production, increasing revenues, improving sector governance and ultimately improving service delivery and reducing the fiscal burden that the sector places on public resources. The World Bank informally supported the development of this Policy Paper through its policy dialogue with the Government. Some of the PPES key areas are:

i. Investing in generation, transmission and distribution infrastructure;
ii. Diversifying fuel sources by converting most plants to natural gas;
iii. Adopting a new tariff structure;
iv. Private sector participation in generation following a publicly-financed 800 MW;
v. Private sector participation in distribution network; and
vi. EdL corporatization.

65. **The risks of only partial implementation of the Policy Paper are significant.** If early investments to increase levels and reliability of electricity supply are not accompanied by reforms and investments aimed at a concomitant increase in production efficiency, lower fuel costs and increased revenue generation, the fiscal situation in the sector will only worsen. Moreover, given the sector's highly politicized nature, most reforms have not materialized. For example, in 2012, attempts by EdL to outsource its distribution retail services to private service providers, met with strong and sometimes violent resistance from a highly factionalized workforce. The divisions within EdL's workforce are a direct result of Lebanon's confessional approach to

governance and public employment, and highlight the constraints on rational management decision making within a confessional system.

66. **Key investments in generation include the extension of the Deir Ammar Power Station, the Zouk and Jieh reciprocating engines and energy efficiency investments.** It is urgent that the financing arrangements for the critical expansion of Deir Ammar are finalized soon. Adding 540 MW to the current available capacity would represent an increase of almost 20 percent of generation capacity and help to close the current supply-demand gap. It is also critical to take the necessary measures to ensure a smooth completion of the works for the Zouk and Jieh reciprocating engines. The potential for energy efficiency in Lebanon is also an untapped way of decreasing the supply-demand gap. Ministries are considering introducing energy savings schemes in public buildings (including hospitals, schools, Ministries, etc) throughout the country.

67. **The benefits of switching to gas as the main fuel for thermal power plants are considerable.** The development of a liquefied natural gas (LNG) floating storage regasification unit (FSRU) to supply natural gas to Deir Ammar power station in the first instance, represents significant fiscal and environmental benefits to Lebanon. Initial savings from using FSRU supplied gas as an alternative to diesel fuel are estimated at around $300 million annually (for supply of gas to Deir Ammar power station (I and II)). These savings increase dramatically if gas is eventually able to be supplied to other Lebanese power stations. LNG-FSRU remains the most financially and technically feasible means for short-medium term gas supply to Lebanon, and the potential savings from this gas supply should be secured as soon as possible. The World Bank has sponsored various studies into the feasibility of an LNG FSRU for Lebanon that have shown conclusively that LNG is the best choice for supply of natural gas to Lebanon's power generation fleet in the short to medium term, and has offered to provide a partial risk guarantee instrument for the FSRU.

68. **The full potential of hydroelectricity should be harnessed as it represents a low cost generation option in the Lebanese context of high generation costs.** A draft master plan was prepared in 2012, indicating the worthiness to rehabilitate the 92 MW of non-available capacity in order to harness the full potential of the 282 MW of hydroelectric capacity currently installed in Lebanon. Another 233 MW generated from a run of river scheme and 315 MW from peak scheme were identified as potential new hydroelectric developments, all of which economically viable with a minimum selling tariff of less than US¢ 12/kWh.

69. **A revision of EdL's tariff is urgent as a means of improving its financial situation.** The Government's tariff policy has further compounded EdL's losses and its reliance on budgetary transfers. A large portion of budgetary transfers to EdL can be attributed to a nominal tariff freeze in place since 1996, which caps EdL's tariff at a level derived from an average oil price of US$ 23/barrel—far below cost recovery levels. It should be noted that these transfers are also explained by other factors that contribute to low revenue such as low billing and collection rates in the distribution sector, and very high production costs—such as high operation and maintenance costs of power plants due to insufficient regular maintenance, aging assets and high technical losses.

70. **Consumers/voters are willing to pay significantly more to have high quality electricity supply, yet policy-makers have not addressed the issue in over thirty years.** Living without electricity is a social and economic burden for Lebanese households. As revealed in a World Bank's Social and Impact Assessment survey, there is a strong demand for having higher electricity quality even at a much higher price: over half of respondents would be willing to pay double their current expenditures, contingent upon receiving 24 hour service. Overall, savings for households are expected to materialize as the increased tariffs will still be cheaper than what private generators cost. Moreover, this same study calculated that the share of electricity expenditures (EdL and private sector) in household budget is relatively low, even for lowest income quintiles. Simulations also reveal that even relatively high tariff increases across the board do not lead household

expenditures to exceed international norms for any quintile. The impact on the poor and less well-off consumers, would, however, need to be carefully assessed and compensated if needed.

71. **Private sector participation in the distribution network should be sustained in order to harness efficiency gains and quality of service delivery.** The on-going contracts of 3 distribution service providers (DSP) should be implemented successfully. The objective of these contracts is improving management of electricity distribution and retail, as well as improving billing and collection of electricity. Issues with respect to EdL staffing, and recent labor strikes have affected the implementation of these contracts, also impacting EdL revenues. Cohesive Government action is required in order to resolve EdL labor issues in accordance with international best practice for utility management.

72. **The corporatization of EdL remains important in order to increase its efficiency.** At the request of the government, the World Bank provided support to the development of a roadmap leading to corporatization. This roadmap aimed at making proposals in the two following areas: 1) Industry structure— number of companies, ownership, management and other key 'macro-organizational' issues; and 2) Industry model and instruments (how would the unbundled sector function, where would markets be introduced, which segments would be regulated, and additional 'process-related' issues designed to improve the overall sector efficiency). Even though this roadmap was finalized in 2012 and a cross-ministerial committee was established to oversee the planning, not enough consensus has been built in the Government for this critical reform to be implemented.

III. WATER IN LEBANON – COUPLING INFRASTRUCTURE WITH INSTITUTIONAL REFORM

Despite the relative availability of water resources, the Lebanese water sector has not achieved suitable levels of service provision and is not in line with the level of economic development reached by the country. The cost of inaction in the water sector is estimated at about 1.8 percent of GDP[45]*, or 2.8 percent of GDP if the cost of environmental degradation is included. Several factors have led to this situation and require sustained attention. These include: (i) low continuity of water supply due to small storage capacity, large amount of water lost to the sea, growing demand for water and deficiency of the existing water networks; (ii) unfinished reform agenda that contributed to institutional uncertainty and fragmentation of functions particularly relating to wastewater and irrigation; (iii) an irrigation sector that is characterized by inadequate water storage capacity, lack of proper maintenance and a heavy reliance on subsidies; and (iv) regional water establishments (RWE) that severely lack management and financial autonomy and are impeded by limited inter-agency coordination and weak central government oversight. Moving forward, the Government must urgently address priorities within the sector.*

Water in Lebanon

73. **Lebanon has more renewable water resources than any nearby country on a per area basis, amounting to about 2.7 billion cubic meters (BCM) of renewable freshwater per year.**[46] Despite its relatively high per capita water endowment, Lebanon already uses two thirds of its available water resources, high by global standards which average only 10-30 percent. Groundwater is recharged at the rate of 0.5 BCM per year but the extraction rate is estimated to be 0.7 BCM per year. Moreover, demand for water is rising and could reach 2.0 BCM by 2020 and 2.7 BCM by 2030, thus surpassing available supply.

74. **Ground water is an important source of water supply throughout the country for both rural and urban areas but is already over-exploited.** The Ministry of Energy and Water (MoEW) estimates that there are approximately 70,000 wells throughout the country, of which only 13,000 are licensed. Many of these wells have been installed in the basements of residential and commercial buildings, tapping into untreated and potentially contaminated groundwater. Wells also provide a critical source of irrigation to farmers in the Bekaa Valley and in the North where the fields are not supplied by large irrigation systems. The MoEW estimates that groundwater is already over-extracted by 40 percent annually.

75. **A seasonal mismatch between water supply and demand leads to severe yearly shortages.** The majority of flows occur during winter (mid-October to mid-April). This results in water supply deficits during summer, which is further augmented by increased irrigation water requirements. Factors exacerbating this seasonal water imbalance include the very low water storage capacity (6 percent of total resources, compared to the MENA average of 85 percent), deficiency of water supply networks and, on the demand side, rising demand from the municipal and industrial sectors (Figure 26). Groundwater has historically played the role of seasonal buffer but is being exploited at unsustainable levels. In the absence of additional water sources, coastal aquifers will be permanently destroyed, thus depriving the region from a vital buffer against climate variability.

76. **Lebanon also manages important geographic variations in water availability and a marked mismatch between the locations of most precipitation and those of greatest**

[45] Public Expenditure Review for the Water Sector, World Bank, 2009.

[46] Lebanon National Water Sector Strategy, 2012

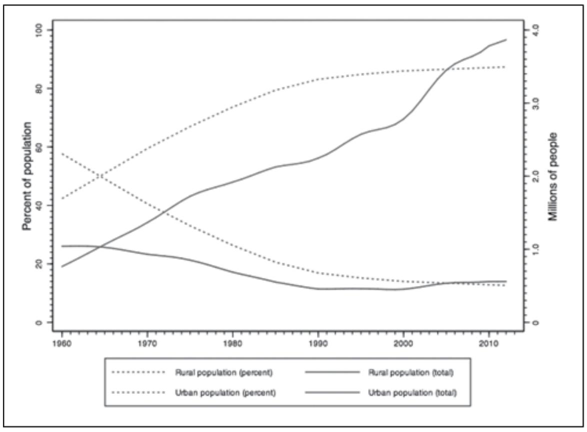

FIGURE 26. Lebanese urban and rural population trends.

Source: World Development Indicators (WDI).

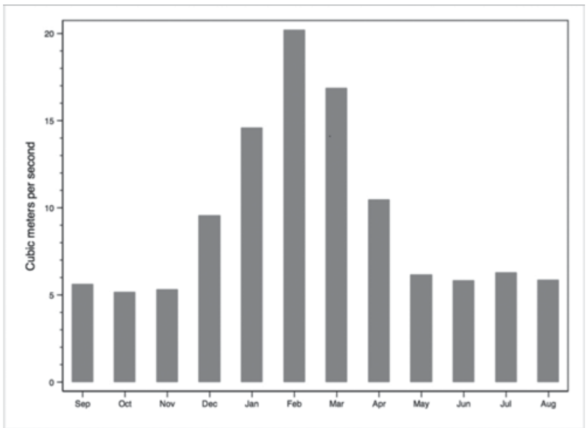

FIGURE 27. Awali River - temporal variations in precipitation.

Source: World Bank staff.

demand respectively. For example, most of the precipitation falls on the western slopes of the Lebanese mountains and runs to the Sea (Figure 27). In contrast, the Bekaa Valley is one of the most intensive agricultural areas. As climate change exacerbates inter- and intra-annual variation, and as a growing urban population demands more household water, pressure on Lebanon's resources will increase in the future. The Greater Beirut and Mount Lebanon area is already home to more than 75 percent of Lebanon's population (Figure 26), with most predictions that it will continue to grow, thus placing more stress on Lebanon's water resources.

Service Deficits and the Poor

77. **Lebanon's water supply services are below the levels expected in a middle income country.** Although network coverage, at 79 percent, is slightly higher than the MENA average (75 percent), there are big regional differences with as many as one household in three in the Northern and Beka'a service areas without access to network water. Total unaccounted for water averages 48 percent, supply continuity is low and households spend three times as much sourcing water from private suppliers as they pay for network water. In the Greater Beirut and Mount Lebanon area, where over half of the population lives, water is supplied for as little as three hours a day over the six month period spanning May through October.

78. **The poor are significantly impacted by the financial burden of expensive and ineffective infrastructure services, including access to water supply.** Low-income households spend eight percent of total household expenditures on securing water to the home, notably higher than international benchmarks. Approximately 28 percent of the Lebanese population, equivalent to one million people, lives under the national poverty line of US$ 4 per person per day.[47] Eight percent of the Lebanese population lives in extreme poverty and, at less than US$ 2.4 per person per day, is unable to meet basic food and non-food needs. Low-income women further carry the largest burden of poverty.

79. **According to UNHCR, over one million Syrian refugees have registered in Lebanon (equivalent to 26 percent of Lebanon's pre-crisis population), further exacerbating poverty and water supply deficits.** In the water sector alone, the cost of reinstating pre-crisis levels of water supply and sanitation services to host and refugee communities is estimated at US$ 375 million (World Bank, 2013).[48]

[47] Lebanon – National Poverty Targeting Program, 2013

[48] World Bank, *Economic and Social Impact Assessment of the Syrian Conflict,* September, 2013.

Institutional and Legal Reforms

80. **Cognizant of the need to make rapid and meaningful change within the sector, the Government enacted water sector Law 221 in 2000.** This created the regional Water Establishments (WEs), intended to be autonomous, efficient and integrated water service providers. Reforms initiated under Law 221 were designed to increase accountability between public agencies, WEs and customers. However, the institutional and legal framework envisaged has not been fully implemented and has created institutional uncertainty over sector responsibilities. As a result, the WEs deal with severe capacity, institutional and financial constraints and are thus not able to improve water supply reliability or financial viability.

81. **Coordination within government agencies remains limited with significant fragmentation of responsibilities for investment planning and execution, and consequent low efficiency of public expenditures.** The partial implementation of the delegated model of service provision has not been complemented by a parallel effort to strengthen central government oversight. Reciprocal accountability between WEs and clients remains weak, as WEs are not adequately empowered to improve service levels. Responsibility for irrigation was supposed to be transferred to the WEs, but has not happened, and proposals to decentralize management to user associations and to increase cost recovery have not been implemented. Flat rate tariffs provide no incentives for consumers to save water or for the WEs to improve service delivery. The intended increased role for private capital and management has also not materialized, largely due to a long standing delay to enacting the "Code de L'Eau" which would enable PPP's in the water sector.

82. **Responsibility for the construction, operation and management of infrastructure is split among multiple government entities.** The Ministry of Energy and Water is nominally responsible for the overall national planning, design and construction of water resources infrastructure, including that for irrigation. Four water establishments are nominally responsible for the operation and maintenance of that infrastructure. These entities are understaffed and underfunded and collect irrigation water use tariffs at low rates. The Litani River Authority (LRA), which operates Qaraoun Dam, also manages a number of irrigation schemes within the Litani River Basin and is able to collect tariffs from about 97 percent of water users. Irrigation infrastructure under its jurisdiction is also reportedly in good condition as the LRA is able to subsidize maintenance with revenues from the sale of electricity from the dam. The Ministry of Agriculture is primarily charged with assisting at the farmer and the field level through extension services such as training, education and demonstration.

Agriculture and Irrigation

83. **Lebanon began investing in modernized irrigation infrastructure with the construction of the Qaraoun dam and reservoir in 1959, several upstream pump-fed irrigation schemes, and, later, construction of additional schemes at the mouth of the Litani River.** These schemes took advantage of Lebanon's relative regional abundance of surface water and supported what became a relatively productive agricultural sector. However, years of civil war and neglect caused serious damage to much of that infrastructure. Following the end of the war, Lebanon undertook a Bank-funded project to rehabilitate and modernize existing schemes. That project was ultimately judged by the Bank to be successful yet evidence from the ground suggests that those outcomes have not necessarily persisted over time nor were they consistent across schemes.

84. **Agriculture is a small and declining share of the economy but still critical to rural livelihoods.** Agriculture generates about six percent of Lebanon's GDP but may employ upwards of 25 percent of the population. The industry and service sectors generate about 20 and 73 percent of Lebanon's GDP, respectively. The absolute value of agricultural output expanded from US$ 0.620 billion

BOX 2. The Ministry of Energy and Water

The Ministry of Energy and Water is responsible for strategic planning of water resources management, including the preparation of the water master plan, regulation and conservation of surface and groundwater resources, and design and implementation of large projects and dams.

MoEW also has the mandate to supervise the Water Establishments (WE's) in their planning and formation of strategies for water monitoring and distribution. Until the development of the National Water Sector Strategy in 2012, an overall water resources master plan or strategy for development of water storage did not exist.

MoEW struggles with lagging capacity in water resources planning, allocation and regulation. The regulation of groundwater abstraction, including the issue of permits for well drilling, is currently not enforced, with a large number of wells reported as illegal. Meanwhile, demand has not been moderated by management measures such as regulation and pricing. Moreover, little has so far been done to anticipate the effects of climate change on water resources or on water supply and irrigation, or to plan for adaptation and mitigation.

(current dollars) to 2.34 billion between 1994 and 2012, an increase of 277 percent; during that same time, the economy grew by 347 percent overall. Thus, agriculture has been declining as a share of GDP as its absolute output has grown at a lower rate than the economy overall.

85. **Over half of permanently cultivated land in Lebanon is irrigated.** Most estimates place the total quantity of cultivated land in at around 328,000 hectares, amounting to about 32 percent of the country's surface area. Of that, about 142,000 hectares are under permanent cultivation, of which 90,000 hectares are irrigated according to official estimates. There are about seven large irrigation schemes and many smaller schemes disbursed throughout the country. Reports on the size and location of these schemes are inconsistent. Five of these schemes were rehabilitated under the Bank-funded Irrigation Modernization and Rehabilitation Project, which closed in 2003.

86. **The irrigation sector faces a number of common challenges.** Most irrigation equipment is antiquated or dilapidated as a result of lack of maintenance. Flood irrigation reportedly predominates, as do open channel conveyances. Agricultural water use tariffs are based on the area of land irrigated rather than on the volume of water applied. The rate of tariff collection is, moreover, low—the only exception to this is the Litani River Authority, which is allegedly able to collect tariffs from 97 percent of users. Water rights are based on multiple sources of law, including Ottoman codes, traditional customs and modern law. Whether and how they are adjudicated is unclear. Illegal groundwater extraction is rampant, while key government agencies are understaffed. It is also not clear that farmers grow optimal crops or have sufficient access to markets. Pesticide use is reportedly excessive and results in decreased demand from foreign importers for Lebanese agricultural products.

87. **Nonetheless, agriculture performs relatively well compared to Lebanon's neighbors.** The productivity of workers in the agricultural sector is high. Although only limited information about Lebanon's agricultural labor force is available, official estimates from the World Development Indicators suggest that Lebanon's agricultural laborers are some of the most productive in the region, with an average productivity of $49,689 per worker. [49] Although this is likely an over-estimate because it does not include seasonal agricultural workers, even if the productivity figures are inflated by 75 percent, Lebanon would still be among the most productive in the region. In addition, official statistics indicate that Lebanon's agricultural yields are high. Lebanon's farmers produce more kilograms of cereal per hectare of land than Iraq, Jordan, Syria or Turkey. High productivity commercial farmers likely account for these figures, whereas rural, small-holder agriculturalists are likely much less productive and enjoy low levels of agricultural security.

[49] FAO Aquastat, 2014.

Recommendations moving forward

88. **The water sector is delivering poor services at a high fiscal and household cost.** The WEs have to overcome tough economic and socio-political challenges if they are to become efficient and accountable service providers. In the meantime, water sector inefficiencies (particularly low collection of tariffs and high water losses) and environmental damage are costing the economy the equivalent of almost 3 percent of GDP annually.

89. **In a renewed effort at sectoral streamlining and reform, the Government finalized and approved, the 2012 National Water Sector Strategy (NWSS).** The strategy outlines physical investments and policy changes that the government seeks in order to address the growing scarcity of water. The NWSS represents a consensus vision for the future of water resource management in Lebanon, however, many of the specific details have yet to be determined. For example, the strategy outlines a number of potential pricing structures for household and agricultural water tariffs but does not commit to a specific policy. Similarly, the strategy identifies a large pipeline of potential investments but does not prioritize or sequence them.

90. Moving forward, several key issues must be addressed for the full and effective implementation of the NWSS:

- **Priority must be given to improvement measures that will clarify the respective obligations and rights of public agencies for the delivery of water services and empower the WEs.** The most important measures would be to: (i) complete the institutional and legal framework for WE autonomy; (ii) improve internal accountability through regulation and performance monitoring; and (iii) streamline arrangements for investment planning and

BOX 3. Irrigation Around the World
Recent Findings

Recent research into the outcomes of irrigation projects globally finds that performance has been underwhelming, with physical infrastructure deteriorating quickly, agricultural productivity growth stalling, and modern irrigation technology not relieving as much stress on water resources as initially anticipated. The causes of underperformance are complex but some common themes have emerged:

- Although irrigation systems have the potential to conserve water, they should not be relied upon to do so. This is because the goal of irrigation systems is to enable plants to transpire more water, which is beneficial because there is an almost one-to-one correlation between transpiration and yield. Irrigation systems are successful because they increase plant water consumption by allowing higher rates of transpiration, in turn allowing farmers to grow either more of the same plant or more water-intensive plants. Holding all else constant, the end result should be an increase in agricultural productivity (World Bank, "Going Beyond Agricultural Productivity", December 2014).
- Investments in irrigation infrastructure should be undertaken with a plan for sustainable financing. Irrigation schemes require on-going operation and maintenance (O&M) expenditures. Failure to implement adequate O&M regimes leads to premature depreciation of the infrastructure, resulting in a build-neglect-rebuild cycle. Irrigation investments are often undertaken with the expectation that O&M activities will be financed through cost recovery with central governments providing the bulk of upfront capital costs. Responsibility for O&M is subsequently transferred to decentralized authorities expected to recover the on-going costs of O&M through tariffs or other user fees. While this is an equitable idea—those who benefit from a service also pay for it—the global experience implementing cost recovery regimes has been largely unsuccessful. Even in the best of circumstances—i.e. places with high-functioning governments and productive agricultural systems—it is not clear that full cost recovery has been achieved.
- Investment in social and human capital is just as, if not more important, than investment in physical infrastructure. Social capital includes laws and policies, pricing structure of tariffs, access to financial and agricultural markets. Human capital refers to the capacity of individual farmers to conduct agricultural activities, including education, training and expertise to grow the right crops in the right places at the right times etc.

BOX 4. The Bisri Project

The Water Supply Augmentation Project ("the Bisri" project) is a national infrastructure project of critical importance. Financed by the World Bank, Islamic Development Bank and Lebanese Government, the project involves the construction of the second largest water supply dam in Lebanon, a series of upstream wastewater treatment infrastructure and 2 hydropower plants among other components. This infrastructure will connect to infrastructure currently under implementation under the Greater Beirut Water Supply Project, thereby drastically increasing the volume of water available to the Greater Beirut Mount Lebanon region, where over 2.2 million people live, many of whom are poor. The project also places priority focus on the institutional reforms and capacity strengthening of the Beirut and Mount Lebanon (BML) WE and its partners, for the long term sustainable delivery of adequate water services to the beneficiary population. This includes monitoring of groundwater reserves, balancing demands for urban water supply with those of rural and agriculture and improving technical and financial efficiencies within BMLWE operations and customer outreach. The integration of infrastructure with institutional reform is thus critical to the overarching success of the water delivery program and can be used as a model for infrastructure investment in Lebanon moving forward.

implementation. At the same time, the WEs and their boards must raise service standards and cost recovery in tandem.

- **Investment needs to be reconciled with fiscal realities, linked to key reforms, and targeted at priority outcomes.** The NWSS projects budgets which far exceed likely fiscal headroom, implementation capability and availability of finance. In Lebanon's currently constrained fiscal circumstances[50], public resources can provide only a fraction of this financing, and alternatives of increased user or private financing are not near-term options. Detailed planning will have to prioritize investments within realistic financial ceilings, ensuring that the highest impact investments are undertaken and are linked to accompanying reforms.

- **Improvements in investment and operational efficiency depend on restructuring and building implementation capacity in a practical, prioritized way.** The NWSS provides for numerous measures to define responsibilities, restructure and strengthen agencies, empower, resource and staff agencies etc. However, capacity can only grow gradually, and implementation will have to be prioritized and sequenced within available capacity.

- **Increasing ownership of sector reform – and reflecting back stakeholder concerns and political economy realities into fine-tuning the NWSS – is critical.** Lebanon could follow worldwide best practice in reform implementation by initiating a targeted engagement strategy of broad dialogue and outreach to increase ownership of the reform program.

[50] The overall fiscal deficit has averaged 10 percent since 2000, while gross public debt stood at 145.5 percent of GDP at the end of 2014, one of the highest in the world.

DATA APPENDIX

TABLE 3. Lebanon: Selected Economic Indicators, 2012-2017

	2012 Est.	2013 Est.	2014 Est.	2015	2016 Proj.	2017
	(annual percentage change, unless otherwise specified)					
Real sector						
Real GDP	2.2	0.9	2.0	2.5	2.5	2.5
Real GDP per Capita	1.2	-0.1	1.1	1.5	1.5	1.5
Agriculture (share of GDP)	4.5	4.8	5.2	5.2	5.1	4.9
Industry (share of GDP)	21.5	22.1	22.8	23.0	23.0	23.0
Services (share of GDP)	74.0	73.2	72.0	71.8	71.9	72.1
Money and prices						
CPI Inflation (p.a)	5.7	2.7	1.9	2.2	3.0	3.1
Money (M3, including non-resident deposits)	8.1	9.0	6.0	6.0	8.7	8.7
	(percent of GDP, unless otherwise specified)					
Investment & saving						
Gross Capital Formation	29.4	30.4	31.2	32.6	31.5	33.2
o/w private	27.8	28.5	29.1	30.5	29.1	30.8
Gross National Savings	6.7	3.8	9.0	15.8	15.4	17.6
o/w private	9.8	15.7	14.1	21.2	23.3	24.6
Central Government Finance						
Revenue (including grants)	22.2	21.2	23.7	22.2	21.5	22.0
o/w. tax revenues	15.6	15.2	15.4	15.7	15.5	15.5
Total expenditure and net lending	30.9	30.7	30.9	29.7	31.8	31.4
Current	29.3	28.8	28.9	27.6	29.4	29.0
o/w Interest Payment	8.4	8.5	9.0	9.0	9.4	9.6
Capital & Net Lending (excl. foreign financed)	1.6	1.9	2.0	2.1	2.4	2.4
Overall balance (deficit (-))	-8.7	-9.5	-7.2	-7.5	-10.3	-9.4
Primary Balance (deficit (-))	-0.3	-0.9	1.8	1.5	-0.8	0.2
External sector						
Current Account Balance	-22.7	-26.6	-22.2	-16.7	-16.1	-15.6
o/w Export (GNFS)	46.6	45.7	46.2	47.7	49.8	51.2
o/w Import (GNFS)	73.5	75.4	73.5	70.2	72.3	73.8
Remittances	4.8	5.5	6.1	6.1	6.3	6.8
Trade Balance (GNFS)	-27.0	-29.7	-27.3	-22.4	-22.5	-22.6
Gross Reserves (months of imports GNFS) /1 /2	11.3	11.4	11.6	11.2	11.3	11.3
Total Public Debt						
Total Debt Stock (in million US$)	57,700	63,467	66,633	73,051	78,751	85,405
Debt-to-GDP ratio (percent)	133.5	143.1	145.7	151.8	152.9	155.3
Memorandum Items:						
Nominal GDP (in billion LBP)	65,132	66,861	68,939	72,526	77,665	82,886
GDP (in million US$)	43,205	44,352	45,731	48,110	51,519	54,982

Source: Government data, and World Bank staff estimates and projections.
*/1Gross Reserves (months of imports GNFS) = (Imports of Goods & Services / Gross Res. excl. Gold)*12*
/2 Total Imports using the BOP data from the Quarterly Bulletin of BDL

SELECTED SPECIAL FOCUS FROM RECENT LEBANON ECONOMIC MONITORS

FALL 2014 LEM: DOWNSIDE RISKS MATERIALIZE

Towards an Effective Social Safety Net in Lebanon (Special Focus) Lebanon's social safety nets (SSNs) fail to protect poor and vulnerable Lebanese as it consists of a multitude of small and poorly targeted programs that suffer from low coverage, high leakage, and limited benefit levels, while large budgetary resources are expanded on universal subsidies which are pro-rich and crowd out other social spending. With poverty incidence elevated and broadly unchanged for the past 25 years, Lebanese citizens revealed in a World Bank (2014d) survey of country stakeholders that social protection ranked second in their development priorities. International experience reveals that carefully designed SSNs can help prevent shocks from pushing vulnerable households into poverty, help tackle the problem of spatial pockets of poverty in slums and rural areas, and also can help break the cycle of intergenerational poverty. With these objectives in mind, in 2011 the Ministry of Social Affairs embarked on a modernization of Lebanon's SSN system, starting with the introduction of the National Poverty Targeting Program. The NPTP is the first means-tested targeting social assistance program in Lebanon. With the Syrian crisis pushing vulnerable households into poverty, the NPTP has been scaled up to cover more beneficiaries as part of a three year emergency project to help mitigate the impact of the Syrian crisis on Lebanese households. Most recently, the institutionalization of the NPTP into a permanent program with an annual budgetary allocation has been proposed by members of Parliament, which if approved would constitute a significant positive step forward in the effectiveness of Lebanon's SSN system.

SPRING 2014 LEM: A SLUGGISH ECONOMY IN A HIGHLY VOLATILE ENVIRONMENT

A Sovereign Wealth Fund for Lebanon: Issues and Preliminary Recommendations: (Special Focus 1) As Lebanon contemplates prospects of sizeable hydrocarbon discoveries, the country is in the process of designing an institutional framework to manage these resources. One such issue is the establishment of a Sovereign Wealth Fund (SWF), as required by the 2010 Hydrocarbon Law. This Special Focus provides an overview of the various types of SWFs that have been established across countries, draws lessons from these experiences, highlights some pitfalls, and presents preliminary recommendations for Lebanon as it moves towards establishing its SWF. Key among these recommendations is that the Lebanese SWF's design should include (i) integration with the budget system, (ii) some (limited) flexibility in operational rules, (iii) no (or limited) earmarking but no extra-budgetary spending, (iv) coherence with country investment strategy, and (v) transparency and accountability.

New Coincident and Leading Indicators for the Lebanese Economy: (Special Focus 2) Weak economic statistics in Lebanon impede economic analysis and decision making. To remedy this, World Bank staff developed two indicators of economic activity for Lebanon: a coincident indicator (WB-CI) and a leading indicator (WB-LI). These indicators, which are based on an expanded NBER-Conference Board methodology, reveal promising statistical properties that should make them valuable coincident and leading (one-year ahead) indicators for the Lebanese economy. Based on these indicators, GDP growth for 2012 and 2013 is estimated to be, respectively, 2.2 and 0.9 percent while growth in 2014 is predicted to reach 1.5 percent. Aside from having a high degree of accuracy, both indicators are of relatively high (monthly) frequency and are available with a relatively small time lag (2-3 months), which make them ideally suited for economic analysts, investors, and policy makers alike. In contrast to the BdL-CI, the WB-CI points to a deceleration in economic activity during the first ten months of 2013, which, if sustained over a few more months, would warrant a different monetary policy stance than the one based on the BdL-CI. This monetary policy example highlights the critical importance of having accurate, high frequency, and timely economic indicators.

FALL 2013 LEM: THE BRUNT OF THE SYRIAN CONFLICT

Lebanon: Economic and Social Impact of the Syrian Conflict: (Special Focus) During the 2012-2014 period, the conflict in Syria is having a large, negative, and rapidly growing impact on Lebanon's economy, its social fabric, and its public services. On the economic front, the deteriorating security situation is undermining consumption, investment which is dragging down growth. The cumulative losses in economic activity could reach an estimated USD7.5 billion. On the social front, social cohesion is rapidly deteriorating partly due to combination of rising poverty— approximately 170,000 Lebanese would be pushed into poverty (over and above the 1 million currently living below the poverty line)—a worsening labor market which is estimated to result in a doubling of the unemployment rate to above 20 percent, rising insecurity, amid deteriorating core public services. Public services are under pressure given the sudden and large increase in their demand arising from the Syrian refugee influx. The fiscal cost of Syrian conflict is estimated at USD2.6 billion, of which USD1.5 billion stems from foregone government revenue collection while the remaining USD1.1 billion are expenditure incurred by the government to meet some of the surge in demand for public services. Across all core public services, the surge in demand is currently being partly met through a decline in both the access to and the quality of public service delivery. It is estimated that an additional spending of USD2.5 billion would be required for stabilization, i.e., to reinstate the access to and quality of public services to their pre-Syrian conflict level.

SELECTED RECENT WORLD BANK PUBLICATIONS ON LEBANON

(for an exhaustive list, please go to:
http://go.worldbank.org/8700A29QW0http://go.worldbank.org/5N4AMNJXV0)

Title	Publication Date	Document Type
MENA Quarterly Economic Brief, Januar 2015: Plunging Oil Prices	2015/01/29	Brief
Economic effects of the Syrian war and the spread of the Islamic state on the Levant	2014/12/01	Policy Research Working Paper
Lebanon Economic Monitor: Fall 2014 (English)	2014/10/31	Brief
New coincident and leading indicators for the Lebanese economy (English)	2014/06/01	Policy Research Working Paper
Lebanon Economic Monitor: Spring 2014 (English)	2014/04/30	Brief
Lebanon Economic Monitor: Fall 2013 (English)	2013/10/31	Brief
Lebanon - Economic and social impact assessment of the Syrian conflict (English)	2013/09/20	Board Paper
Lebanon Economic Monitor: Spring 2013 (English)	2013/06/25	Brief
Lebanon - Economic and labor force impact of the change in the wage structure of the public sector (English)	2013/06/01	Policy Note
Supporting innovation in SMEs in Lebanon through a public/private equity fund: the iSME fund (English)	2013/02/01	Brief
Doing business 2013: Lebanon - smarter regulations for small and medium - size enterprises: comparing business regulations for domestic firms in 185 economies (English)	2012/10/23	Working Paper
Lebanon - Economic monitoring note (English)	2012/09/01	Brief
Doing business in a more transparent world 2012 – economic profile: Lebanon - comparing regulation for domestic firms in 183 economies (English)	2012/01/01	Working Paper
PPIAF assistance in Lebanon (English)	2011/07/01	Brief
Lebanon - Large scale solar water heater market development program in Lebanon (English)	2011/06/01	Working Paper
Lebanon - Thermal standards for buildings: Review and implementation plan (English)	2011/06/01	Working Paper
Lebanon - Prototype Carbon Fund (PCF) Trust Fund Grant for Nahr Al - Barid Project: grant completion report (English)	2010/12/31	Working Paper
Status of Projects in Execution (SOPE) - FY10: Middle East and North Africa region - Lebanon (English)	2010/10/03	Annual Report
Lebanon - Statistical capacity building with the Central Administration of Statistics: report on gender statistics (English)	2010/08/28	WWorking Paper
Development horizons (English)	2010/04/01	Newsletter
Doing business 2011: Lebanon - making a difference for entrepreneurs: comparing business regulation in 183 economies (English)	2010/01/01	Annual Report
Lebanon - World trade indicators 2009 (Vol. 1 of 2): Trade brief (English)	2009/12/01	Brief
Lebanon - World trade indicators 2009 (Vol. 2 of 2): Trade at a glance (English)	2009/12/01	Brief
Lebanon - Social impact analysis for the electricit and water sectors (English)	2009/11/01	Brief

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