



Palestine Economic Policy Research Institute

**Macroeconomic Structure, Financial Markets,
and the Financing of Government Activity:
Lessons for Palestine**

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December 2018

Foreword

One of the enduring policy research topics that has featured in the work of MAS over the years has been the area of monetary policy and banking in Palestine, an issue of vital concern to the stability of the economy and its long-term development prospects. Accordingly, MAS has teamed up with the Palestine Monetary Authority (PMA) for several years in identifying specific research projects of concern to the PMA that MAS could address through focused policy studies. These investigations have touched on a number of issues, ranging from banking regulation, laws and policy, to financial sector and macro-economic performance, and monetary policy and currency options. In addressing these issues, MAS has mobilized specialized Palestinian and international scholars to ensure that the best possible analysis and policy advice is provided.

This study, "Macroeconomic Structure, Financial Markets, and the Financing of Government Activity: Lessons for Palestine" is the latest of such efforts, and has been prepared in close consultation with the PMA. It follows on from a related study published in 2017 on "Government Borrowing and Liquidity and the Stability of the Palestinian Banking System". As such, the study assesses what international experience and best practice can offer to Palestinian National Authority (PNA) policy-makers seeking options to finance government activity in a climate fraught with risks. It has been prepared by a team of international economists who thoroughly immersed themselves in the pertinent Palestinian statistical and literature on the subject, as attested to by the study's exhaustive list of references and mastery of the Palestinian economic dilemma. It comprises both a critical analysis of the range of macroeconomic imbalances and constraints under which the PNA operates, as well as a methodical review based on international experience of optional financial and policy instruments to which the PNA might be able to resort under current or different circumstances.

Without pre-empting the findings and recommendations of the study which are clearly laid out in the following chapters, suffice it to say that the authors have recognized the merits of a national currency as critical to conduct independent monetary policy and exchange rate management, as well as to stabilizing government deficit financing. However, they stress that a clear distinction must be made between short-term and long-term objectives, which require meeting certain institutional and economic conditions, none of which are currently in place. Indeed, their analysis suggests that unless existing productive capacity weaknesses and macroeconomic imbalances are first addressed, the introduction of a Palestinian currency could do more harm than good. It also suggests that, even beyond the short-run, a national currency will, by itself, not serve as a panacea to achieve sustained growth and development, as it has to be combined with public and private investment that targets building a productive economy and viable export sector.

MAS wishes to gratefully acknowledge the excellent contribution of Professor Dr. Heiner Flassbeck and his colleagues Dr. Patrick Kaczmarczyk and Dr. Michael Paetz to further deepening our collective understanding of the complex issues reviewed here.

Dr. Nabeel Kassis
Director General

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Authors acknowledgements

The authors would like to thank Raja Khalidi and his colleagues at the Palestine Economic Policy Research Institute (MAS) for their support, the Palestine Monetary Authority (PMA) for an efficient and effective cooperation, all reviewers from the MAS and PMA for their feedback, Tom Hunt, Edward Pemberton, and Liam Stanley for their editing advice, and Richard Senner and Sascha Buetzer for their input throughout the period of our research. All errors remain ours.

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Abstract

The purpose of this paper is to assess feasible options for sustainable deficit financing in Palestine. As the question of sustainability is inevitably tied to real economic conditions, recommendations emerge from an extensive analysis of Palestinian economic development, current institutional constraints, and the monetary system. The conclusions suggest that neither issuing government bonds in a foreign currency, nor introducing a Palestinian currency to engage in monetary financing are viable options *as of now*, given the dire state of the economy and the restrictive institutional environment.

This report provides substantive empirical evidence for this reasoning. With regards to Palestinian economic development, it is noted that for the past 20 years, the Palestinian National Authority (PNA) has relied on foreign grants and donations to finance its expenditures. More recently, this stream of income has substantially decreased, which led to the suspension of salary payments for civil servants as well as a general decline in government spending. Yet, sizeable and persistent trade deficits continue to push the government and, more excessively, the private sector into debt. Since there is no Palestinian currency, both the public and private sector rely on foreign reserves. Although the PNA and Palestine Monetary Authority (PMA) managed to avert a full-blown currency crisis thus far, it is unlikely that current modes of deficit financing can be sustained indefinitely, as domestic stocks of foreign reserves rapidly deplete, and the accumulation of arrears and debt mounts at an alarming rate.

This leaves the government with two options for deficit financing: either issuing debt securities on capital markets or introducing a Palestinian currency to finance expenditures via the central bank. Regarding the first option, the study argues that capital market financing without a fully-fledged central bank leads to high interest rate volatility and financial instability. As for monetary financing, in the current institutional and economic environment, the prerequisites for the introduction of a national currency are non-existent. If anything, its exchange rate would be highly volatile, whereas imported inflation could further destabilise economic development.

Therefore, it is recommended that the Palestinian authorities should focus on a different set of short-run and long-run objectives. As *any* issuance of bonds is contingent upon stabilising the external sector first, the PNA must deploy strategic political and economic interventions in the short-run to revitalise the productive base and increase exports. In the long-run, the introduction of a Palestinian currency is indispensable for sovereign economic development. It cannot be overstated, however, that any attempt to issue debt securities without having rectified current imbalances would lead to highly volatile interest or exchange rates. The report concludes by laying out specific policy measures that the PNA, supported by the PMA, can pursue, despite current institutional and economic constraints.

1. Introduction

Assessing options for sustainably financing a government deficit must be embedded in an analysis of wider economic and institutional conditions. This is especially so in the case of Palestine, whose *sui generis* political and economic ties with Israel affect much of its overall performance. This paper therefore builds its recommendations based on a comprehensive analysis of long-term trajectories of Palestinian economic development, the institutional infrastructure governing economic relationships, and the functioning of the monetary system.

The findings imply that neither capital market-based financing (i.e. issuing bonds denominated in a foreign currency) nor monetary financing (either directly via its central bank or indirectly via secondary markets, with a central bank as a lender of last resort) constitute viable options to finance the government deficit. Given the excessive imbalances in the external sector, the former would imply highly volatile interest rates, whereas the latter is contingent upon the introduction of a Palestinian currency, for which neither the political, nor the economic prerequisites are in place. Instead, the study proposes to raise further external support to fund investments in productive activities to reduce the trade and current account imbalances through an increase in exports.

The structure of the report is as follows. First, it presents an analysis of the development of key economic indicators over the past 20 years. In line with research conducted by international institutions, most notably the United Nations Conference on Trade and Development (UNCTAD), the International Monetary Fund (IMF), and the World Bank, the study identifies a strong reliance of the Palestinian economy on foreign currency transfers (esp. grants and donations) and consumption, as well as a deterioration of the most important industries for long-term economic development, namely agriculture and manufacturing. Subsequently, section 3 analyses Palestinian external trade, with a focus on the regulatory regime (Paris Protocol) and the relationship to Israel. Sections 4 and 5 examine the financial accounts of the Palestinian economy and its fiscal conditions, which essentially reflect and validate previous findings. In these sections, however, the study also sheds further light on the extent to which Palestine was (and still is) dependent on foreign support, and how the diminishing revenues from grants and donations lowered government spending and spurred the accumulation of arrears. Section 6 turns towards a detailed analysis of the Palestinian financial sector and provides a modern accounting framework to explain the process of money creation. Both aspects are critical to the conclusions. In relation to these insights, the study presents different options for financing the government deficit (via capital markets and a national central bank) in section 7, before arriving at final conclusions in section 8.

In what follows, it should be noted that it is understood that Israeli occupation and the regulations set out in the Paris Protocol are the greatest single cause for the Palestinian economic malaise. All conclusions and recommendations therefore should be regarded as options that the PNA ought to pursue *within* the excessive limitations of the current regulatory constraints and the volatile political climate.

2. Palestinian economic development since 1994

To set a solid foundation for recommendations, this section analyses Palestinian economic development since 1994. Key indicators include GDP growth, financial and sectoral contributions to GDP, unemployment, inflation dynamics, and the development of wages and productivity. Most importantly, the Palestinian economy relies strongly on private and public consumption, and the productive structures in tradable goods sectors are substantially depleted. Furthermore, the data show that productivity developments were generally weak, and real wages faced a drastic decline over the past years. This decline, in turn, explains most of the reduction of the trade deficit, which does not appear to be much affected by exchange rate movements. Overall, several key indicators, such as real GDP growth, inflation rates, and productivity growth, are subject to high volatility, which are attributed to the fragile political environment.

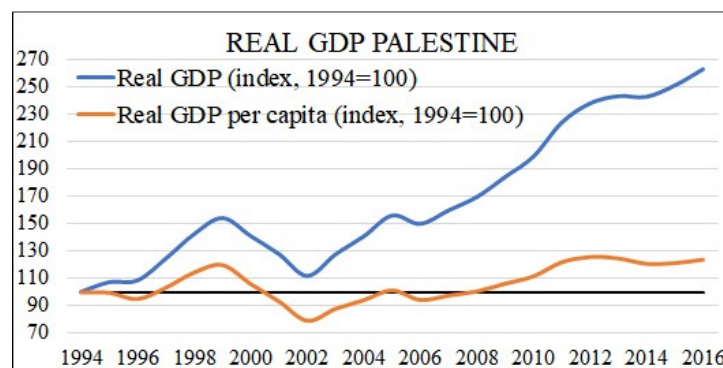
2.1. Production, Prices and Unemployment

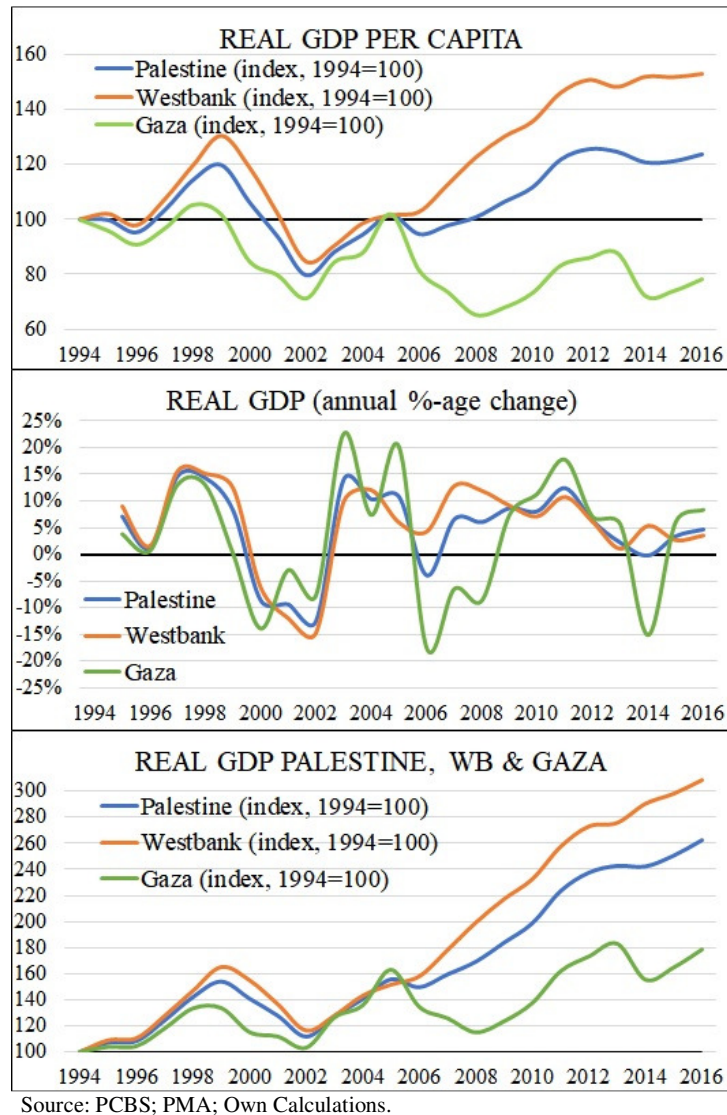
2.1.1. Real GDP Growth

Figure 1 illustrates the development of real GDP since 1994. The data show that even though real GDP growth averaged about 3.5 per cent per year, real GDP per capita only increased by 23.8 percentage points throughout the entire period – which corresponds to an average annual growth rate of merely 1.2 per cent. In particular, the growth rates in Gaza were much lower and more volatile, especially after 2005. In per-capita units, real GDP in Gaza is today 22 per cent below 1994.

The reasons for the Palestine's volatile and weak economic trajectory can be attributed primarily to political factors. The outbreak of the second intifada in September 2000, the election of the Hamas in 2006, and the Gaza War in 2014, are all manifestations of the fragile environment, which, in turn, lowered real GDP growth and private sector confidence. In addition, as further elaborated in section 3, barriers to the movement of people and goods, Israeli settlements, and a restrictive regulatory environment suffocate the Palestinian economy even in absence of major political disruptions. Finally, as argued in greater detail in section 4 and 5, constraints on government revenues have in the past led to the suspension of salary payments of public employees and a sizeable accumulation of arrears. Given the importance of domestic consumption for economic growth in Palestine, such developments adversely affected GDP.

Figure 1: Real GDP, Unemployment and Prices in Palestine





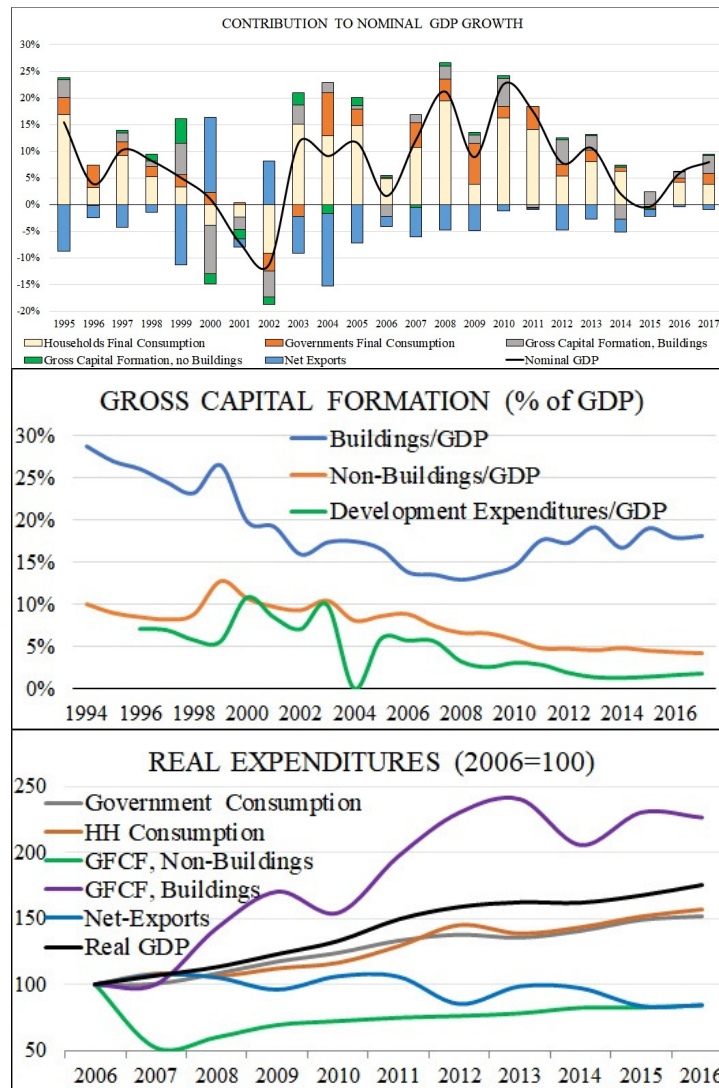
2.1.2. Financial and Sectoral Contributions to GDP Growth

From Figure 2, which illustrates the contributions of different expenditure categories to nominal GDP growth, several important conclusions emerge. First, the most conspicuous fact is that economic growth over the past 20 years was primarily driven by private and government consumption. For some years (i.e. 2004 and 2009), the contribution of government expenditures to GDP growth is even greater or nearly as great as that of private consumption. Since 2010, however, government expenditure contributes little to economic growth, while household consumption has declined too. As shown below, decreasing donations and salary suspensions are the principal cause for both observations.

Second, excessive trade deficits have, for most observations, adversely affected GDP growth. The years 2000 and 2002 mark the only two exceptions, in which Palestine managed to lower its trade deficit (in absolute terms), so that net exports had a positive impact on nominal GDP growth. Also, since the (absolute) trade deficit grew comparatively less during the past 10 years, the magnitude of its negative impact was consequentially reduced. As shown in section 3.2, however, the deficits remain far from sustainable.

Third, the data show that gross capital formation (GCF) in buildings has replaced consumption expenditures as the key driver of GDP growth, whereas investments in non-buildings remain of miniscule importance. Notwithstanding the importance of reconstructing a war-torn economy, this trend is alarming. On the one hand, it indicates a continuous depletion of productive capacities and infrastructure. On the other, as most private investments are concentrated in this sector too, it suggests that Palestinian businesses do not have any incentives to invest in tradable sectors and/or production. This is all the more worrisome as the small size of the Palestinian economy requires the PNA to adopt an export-led growth strategy, for which productive investments are critical.

Figure 2: GDP: Growth and Expenditures



Source: PCBS; PMA; Own Calculations.

The developments in real investment expenditures since 2006 confirm the findings presented above (cf. figure 2, bottom right). Higher expenditures for buildings drive real GDP, whereas investments in non-buildings in 2016 were, in real terms, lower than in 2006. The longer-term trends (ibid., bottom left) further illustrate the general decline of GCF across all categories – buildings, non-buildings, and development – from 1994 to 2006. However, as productive capital formation (non-building and development) continued to decrease after 2006 (and reached a historical low in 2016), the share of GCF attributed to buildings markedly picked up and is now as high as in the early 2000s.

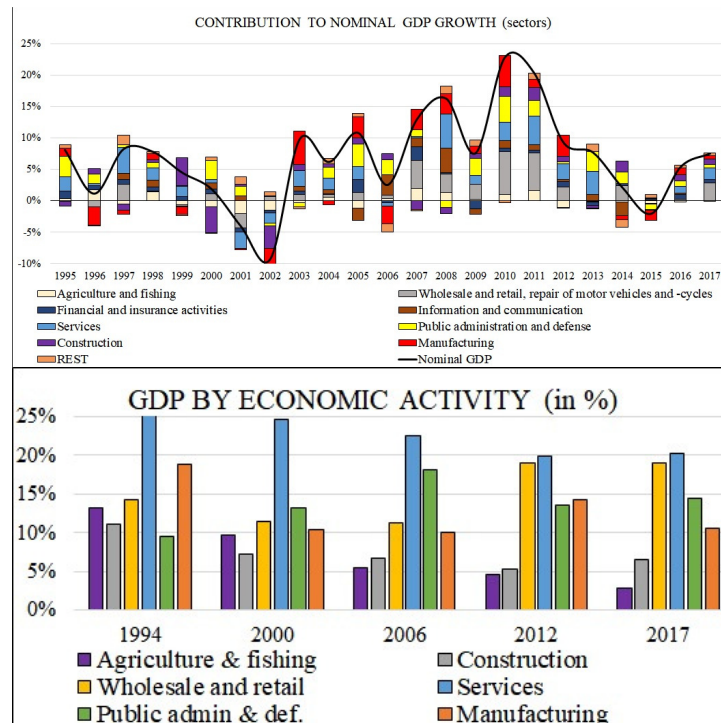
These trends fundamentally restructured the Palestinian economy, as shown in figure 3. With regards to sectoral contributions to GDP growth, construction, wholesale and retail, and services – thus sectors largely irrelevant for exports – became the main drivers of economic growth. At the same time, the sectoral contributions of manufacturing and agriculture continuously diminished and were even negative for some years. The overall share of manufacturing in total value added shrunk from 19 per cent of GDP (1994) to 11 per cent (2017), whereas the share of agriculture and fishing declined from over 13 per cent to less than a paltry 3 per cent (cf. figure 3, bottom).

In summary, sectors of rather minor importance for long-term growth prospects account for the largest shares in contributions to GDP growth (although the share of services itself decreased from 25 per cent in 1994 to 20 per cent in 2017).

2.1.3. Unemployment

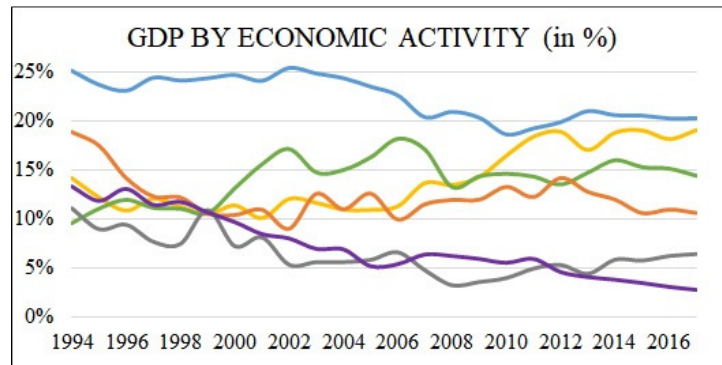
During the second Intifada, unemployment rates almost tripled within a few years from 12 per cent in 1999 to over 30 per cent in 2002 (cf. figure 4). In 2016, average unemployment in Palestine was still about 27 per cent, whereby it is important to note that unemployment rates in the West Bank and Gaza substantially differ. Whilst unemployment in the West Bank fell to 18.3 per cent in 2016, Gaza’s unemployment rate increased even compared to the early 2000s, standing now at 41.7 per cent.¹ As the labour force in Palestine more than doubled during the same period, real GDP growth was insufficient to generate enough jobs and reduce unemployment rates to acceptable levels. Overall, Palestinian unemployment rates are among the highest in the world and remain a major problem in West Bank and (even more so) in Gaza.²

Figure 3: GDP: Growth and sectoral contributions



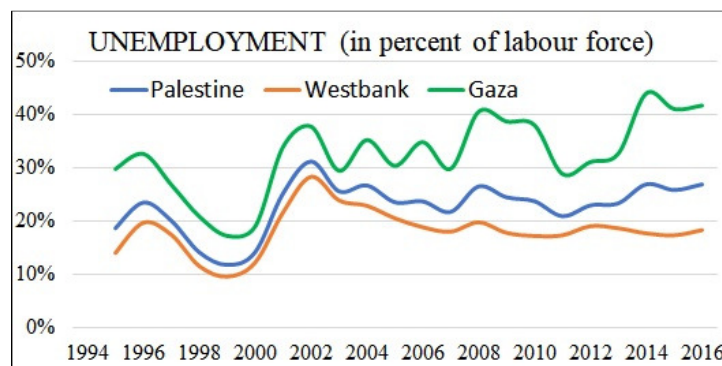
¹ This is, in part, due to a stronger increase in the Gaza labour force compared to the West Bank.

² In what follows, we will focus on the Palestinian economy as such, and only distinguish between Gaza and the West Bank when regarding this distinction as relevant. Since this study seeks to analyse the implications of issuing government bonds for Palestinian economic development, we find it reasonable to focus on economic factors affecting the whole country, even though the political fragility in Gaza is, without a doubt, an issue that deserves particular attention and needs to be resolved.



Source: PCBS; PMA; Own Calculations³.

Figure 4: Unemployment



Source: PCBS; PMA; Own Calculations.

The problem of creating a sufficient amount of jobs might be exacerbated in the future, given the high population growth and the currently low participation rate (45.3 per cent in 2017).⁴ This would entail the risk of social unrest and/or induce many Palestinian workers to seek employment in Israel – especially as the wages there (incl. settlements) are much higher. As shown in section 4, the salaries of Palestinians working in Israel are already a significant source of domestic income, yet their disproportionate exposure to Israeli measures (e.g. frequent border closures) makes them quite volatile.

2.1.4. Inflation Dynamics

Deriving a price index for GDP in Palestine is complicated, as different currencies are in use. The New Israeli Shekel (NIS) is the most common currency for cash payments, while the US-Dollar (USD) and the Jordanian Dinar (JD) function rather as a store of value, or as a means of payment for large purchases and long-term contracts.⁵ For these reasons, figure 5 shows prices and inflation rates in NIS as well as USD.⁶

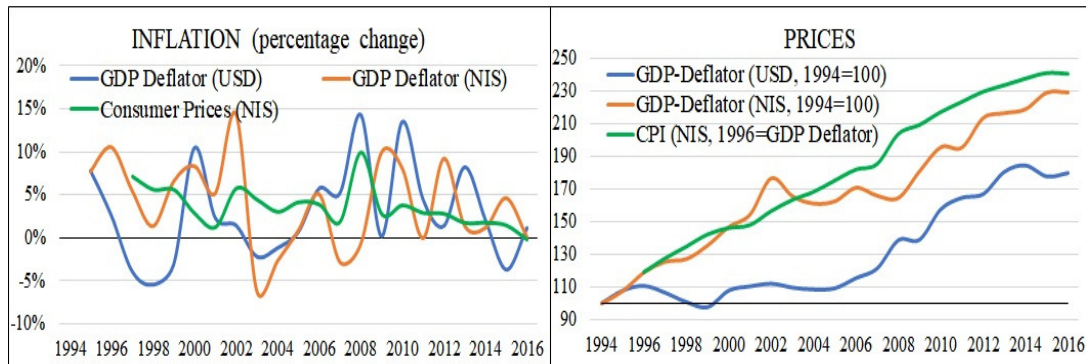
³ For the upper graph, we subtracted 'Financial Intermediation Indirectly Measured', 'Customs duties' and 'VAT on imports, net' from nominal GDP, so that the sum of the growth contributions matches with GDP growth; for the lower graphs we measured the sectoral contributions as per cent of nominal GDP.

⁴ The population increased by roughly one third between 2006 and 2016.

⁵ See, for example, Hamed (2000).

⁶ The GDP Deflator is derived by dividing nominal GDP by real GDP.

Figure 5: Inflation Dynamics



Source: PCBS; PMA; Own Calculations.

Most importantly, inflation rates in both NIS and USD are subject to strong volatility, which damages the investment climate as entrepreneurs are unable to predict prices and profits. Yet, more recently, there is some evidence for declining and more stable inflation rates. In 2016, for example, inflation in Palestine was, on average, lower than in most MENA countries (PMA 2016a). A comparative analysis of NIS and USD price developments reflects the respective movements in exchange rates. From 1994 to 2002, prices in NIS rose faster as the USD appreciated vis-à-vis the NIS. This appreciation, however, was reverted during the following years, from 2002 to 2008, and the exchange rates have remained relatively stable since. This is evident from similar NIS and USD price developments over the past decade, even though inflation rates moved in opposite directions for some years in between.

Although, the Palestinian Central Bureau of Statistics' (PCBS) official GDP measure is denominated in USD, the NIS Deflator appears as the more relevant indicator, as payments and wages are primarily settled in NIS. Moreover, as Israel is Palestine's most important trading partner, analysing prices in NIS seems more appropriate when discussing relative price movements between the two countries. Also, at least in the medium-term, the domestic consumer price index (CPI) evolves similar to the GDP Deflator in NIS.

2.1.5. Wages and Productivity

Using PCBS data on employment, weekly working hours, and daily wages, allows us to construct an index for productivity, unit labour costs and wages, as shown in figure 6.⁷ The most striking finding is that productivity, defined as real GDP per hour worked, did not increase significantly over the past 20 years. Today, it is merely 1.6 per cent higher than it was in 1995. On a cautionary note, however, there are substantial differences between the productivity indexes of Gaza and the West Bank (+18 per cent for West Bank and -29.4 per cent for Gaza), especially after 2006.⁸ Yet, even when analysing Gaza and the West Bank separately, a productivity increase of 18 per cent over a span of 20 years is disappointing. Additionally, real wages and productivity, as well as unit labour costs and prices, regularly diverged from one another, which implies a shift from wage income to profits. This, in turn, increased inequality, reduced domestic spending, and thus explains the falling contribution of household consumption to GDP after 2008 (cf. figure 2). The fact that real wages in 2016 were 20 per

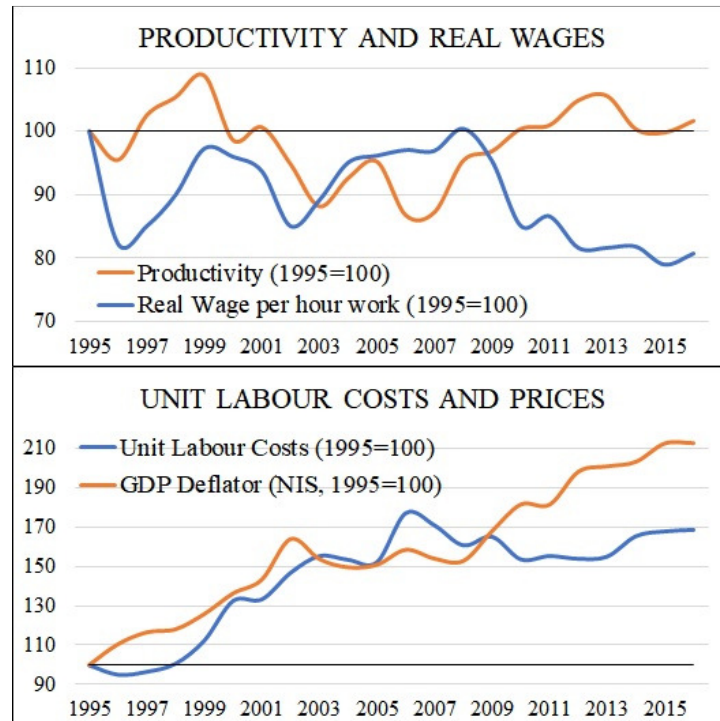
⁷ Both weekly hours and daily wages were based on average values.

⁸ Combining labour market data with GDP data in Palestine can be misleading for at least two reasons: First, labour market data includes territories like Jerusalem (J1 and J2), while the GDP data does not. Moreover, many people living in one region might be working in a different one (i.e. a substantial fraction of Palestinians work in Israel or Israeli settlements). When deriving measures like productivity per working hour, this should be considered. Second, there could be strong differences between economic activity in Gaza and the West Bank, so that aggregating both regions could lead to an average finding that does not fit any of the regions. Appendix A gives a detailed derivation of productivity, real wage and unit labour costs indices and illustrates the different dynamics for Gaza, the West Bank and Palestine. The dynamics in Gaza are considerably worse compared to the West Bank, as expected, but most of the dynamics for Palestine as a whole are not primarily driven by this divergence. Thus, notwithstanding the strong differences in productivity trends since 2006, using data for the entire State of Palestine appears to be a reasonable approach, which we also use for other series. Nevertheless, the reader must bear in mind that the situation in Gaza is much worse.

cent lower than in 1995 underlines the extent of this dramatic decline (the separate numbers for the West Bank and Gaza are 27 per cent and 17 per cent, respectively).

If real wages do not follow productivity, domestic demand is not sufficient to clear domestic supply. Therefore, wage policies aimed at macroeconomic stability require that real wages grow in tandem with productivity, so that the workforce collectively benefits from technological progress. In the case of Palestine, however, real wage development contributes to the volatility of real GDP.⁹ Furthermore, as Vergeer and Kleinknecht (2014) convincingly argue, falling real wages may be *one* reason for low private investments and weak productivity growth.

Figure 6: Productivity, Real Wages and Unit Labour Costs



Source: PCBS; PMA; Own Calculations.

2.2. Relative Prices, Real Wages and the Trade Deficit

The trade deficit poses a significant and persistent problem for the Palestinian economy. With a deficit of 40 to 60 per cent over the past 20 years, most of which is imputable to bilateral trade with Israel, Palestine has one of the highest persistent trade deficits in the world (World Bank, 2016).¹⁰ From a macroeconomic perspective, the size of the deficit implies that the Palestinian real exchange rate must be severely distorted. As the role of relative prices in international trade is widely recognised by most macroeconomists as critical to emerging imbalances, several reports have stressed that, if Palestine had its own currency, a depreciation would be a viable option to reduce the deficit.¹¹

Although in the long-run, the findings of this study support the introduction of a Palestinian currency, there is neither any evidence that relative prices notably affect Palestinian exports, nor any signs of a substitution-effect.¹² To substantiate this argument, figure 7 illustrates the relationship of various

⁹ That said, we are aware of existing interdependencies, in that real GDP also affects real wage development. In addition, political instability in Palestine substantially feeds into both.

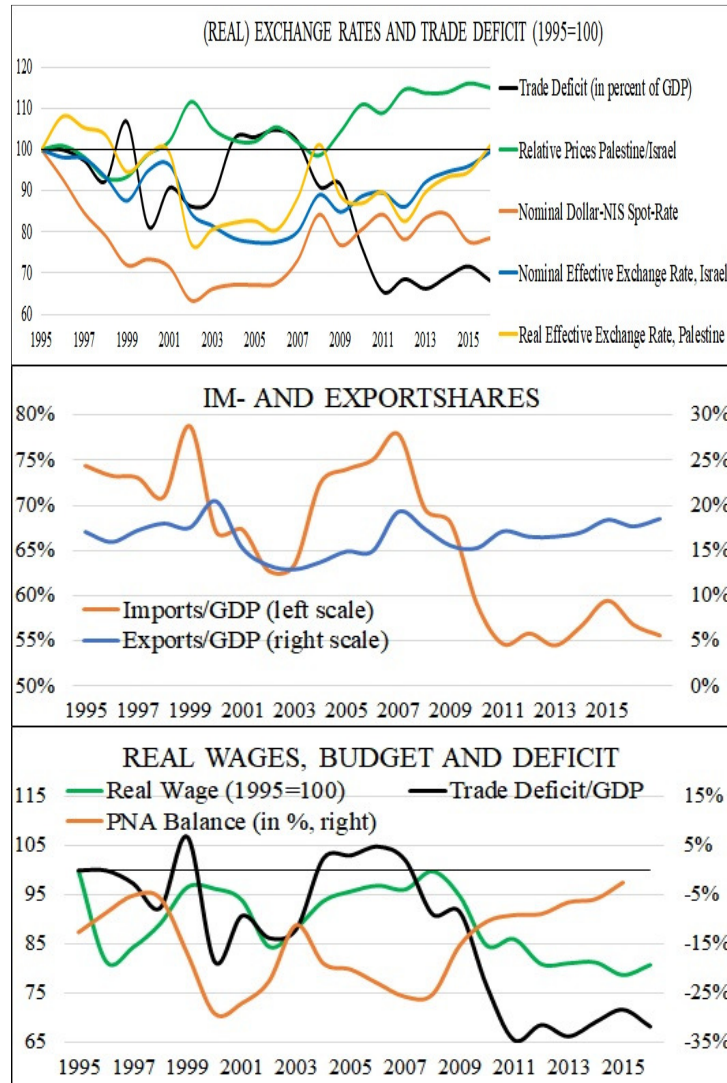
¹⁰ Section 3 focuses on trade relationships and disaggregate exports and imports by sector and country.

¹¹ See, for example, UNCTAD (2009) and UNCTAD (2010).

¹² This would imply replacing imports with domestic production, if the price of the former increases relative to the latter.

measures of relative prices with the development of the Palestinian trade deficit.¹³ Thereby, relative prices and exchange rates were constructed in a way that an increase indicates an appreciation of the Palestinian exchange rate. The data show a depreciation of the nominal Dollar-NIS spot rate from 1995 to 2003, followed by a continuous appreciation afterwards. The effective exchange rates display similar, even though less pronounced dynamics. Based on economic theory, it would therefore be expected that the trade deficit should decrease during the first decade, and rise during the second.

Figure 7: Relative Prices, Real Wages and the Trade Deficit



Source: PCBS; PMA; Own Calculations.

Yet, the actual trade deficit pattern is very different from this prediction. During the first five years after 1995, the trade deficit to GDP ratio is quite volatile, with fluctuations reaching a preliminary high point around 2000. After an increase of roughly 7 per cent in 1999 alone, the deficit sharply falls by nearly 20 per cent in 2000. Whilst *all* exchange rates measures continued to fall thereafter, the trade deficit, against conventional economic theory, rebounded amidst a continuous depreciation and started to grow again. In 2006, it was higher than in 1995, although exchange rate measures have depreciated by 20 to 40 per cent. From 2006 onwards, the relationship between the exchange rates and

¹³ For conducting a real effective exchange rate for Palestine, we used the real and nominal effective exchange rates for Israel. Hence, we implicitly assume similar export structures, which is no adequate assumption as we will see later. However, for the moment, it is the best measure available.

the trade deficit presents another anomaly: even though the former indicates an appreciation, the latter declined by as much as 20 percentage points. As most of the Palestinian trade deficit is imputable to its trade with Israel, the most obvious explanation for it would be to refer to Palestine's real exchange rate with its neighbour (relative prices). However, even based on this measure, the decline in Palestine's trade deficit is accompanied by a relative increase in domestic prices.

Thus, the exchange rates, which usually determine relative prices in international trade, appear insufficient to explain the evolution of the Palestinian trade deficit. Yet, combining the insights from import and export shares and the developments of real wages, it is possible to understand the dynamics of the Palestinian trade balance. First, the data on import and export shares (cf. figure 7, bottom left) show that the volatility of the trade deficit is primarily driven by imports, which have fallen from 78 per cent of GDP in 2007 to 56 per cent in 2017. During the same period, the share of exports remained fairly constant (20 per cent in 2007 and 18.5 per cent in 2017), which implies that (i) exports play a minor role in the Palestinian economy, and, more importantly, that (ii) exports are not sensitive to changes in relative prices.

The decline in imports (relative to GDP), and the concomitant reduction of the trade deficit, can rather be explained by the consolidation of the government budget and falling real wages (cf. figure 6). The implications of diminishing grants and donations, which are the reason behind these trends, are further analysed in section 4 and 5. Moreover, in the case of Palestine, rising domestic prices may have affected the declining share of imports as well. If real wages fall by 20 per cent, the share of necessary *domestic* expenditures in the consumption basket, such as rents and electricity, proportionally increases. This, in turn, crowds out the consumption of foreign goods and services and thus lowers overall levels of imports. The anomalies identified above, namely the simultaneous increase in relative prices (*vis-à-vis* the rest of the world) and a declining trade deficit, are therefore imputable to domestic revenue and wage dynamics.

2.3. Preliminary Conclusions for Introducing a Palestinian Currency

A declining trade deficit based on the reduction of imports (instead of an increase in exports) is not a sustainable long-term strategy. The significant fall in public expenditures and real wages, which was the main source of the declining share of imports, is concomitant with several negative side-effects. These include higher inequality, instable domestic demand, falling private investments (due to lower profit expectations), and weak productivity growth. Consequentially, sectors which could boost Palestinian exports, such as manufacturing or agriculture, are shrinking relative to GDP, which worsens prospects for Palestinian development. Furthermore, the findings presented above indicate that it appears rather unlikely that a (hypothetical) depreciation of a Palestinian currency would serve as a panacea for the trade deficit. As illustrated in section 2.1.2, the long-term decline of the productive sectors in the Palestinian economy led to a substantial erosion of productive capacities. Within the contemporary circumstances, even a currency depreciation would not be able to boost exports considerably, as there are simply too few exportable products or services to begin with. Also, as the prices for imports would substantially increase, living standards in Palestine as well as the trade balance are likely to further deteriorate, at least in the short-run.

3. Foreign Trade and the Palestinian Deficit

In addition to above presented macroeconomic indicators, the nature of Palestinian foreign trade is critical to understand the pressures on the Palestinian budget. The analysis in this section starts with an overview of the current governance framework of Palestinian economic relations (3.1), before presenting a trajectory of Palestinian trade imbalances (3.2), and the composition of Palestinian trade (3.3). Given the strong ties to the Israeli economy, a focus is set on the bilateral economic relations. In sum, it is found that the current institutional structures and the continuous erosion of productive capacities lie at the heart of persistent current account and trade deficits.

3.1. Protocol on Economic Relations between Israel and Palestine

Currently, Palestinian economic relations are governed by the Protocol on Economic Relations (or Paris Protocol - PP),¹⁴ which covers almost all facets of economic affairs, such as taxation, custom and trade policy (incl. procedures and standards), monetary arrangements, banking, agriculture, water and energy supply, and insurance policies. Even though the original purpose was to lay “the groundwork for strengthening the [Palestinian side’s] economic base (...) and for exercising its right of economic decision making in accordance with its own development plan and priorities”, the PP *de facto* formalised a customs union between Israel and Palestine, in which Israel set the terms in accordance with its own strategic and domestic economic imperatives, as well as its obligations and rights under WTO and TRIPS (Khalidi and Taghdisi-Rad, 2009; UNCTAD, 2011; 2014). The Palestinian economy, in turn, was deprived of the ability to pursue a range of independent economic policies and bound to international trade regulations, without enjoying the benefits of these agreements. Although the PP was meant to be replaced by a permanent status agreement in 1999, the failure of negotiating such an agreement extended the regulations set out in 1994 beyond the interim period (Nassereddin, 2016). Over the past decades, much research by international institutions and academics has been devoted to analysing the detrimental impact of this agreement for the Palestinian economy. The synthesis presented here will explicitly focus on the most relevant aspects for the purpose of this paper. These include the loss of revenues through fiscal leakages, the dependence on Israel’s policies, and the disadvantages that Palestinian businesses face vis-à-vis their Israeli and Arab competitors.

3.1.1. Fiscal Leakages

One of the main sources of damage to the Palestinian budget stems from fiscal leakages to the Israeli Treasury. These leakages are the result of the combined effects of Israeli border control, administrative import procedures, and the erosion of the productive base in Palestine. Although the stipulations of the PP facilitate and compound current conditions, the problem of fiscal leakages *per se* was tried to be ruled out formally,¹⁵ and Israeli authorities were obliged to transfer the revenues that legally belong to the PNA “within six working days from the day of collection of the said taxes and

¹⁴ Officially referred to as the 1994 Protocol on Economic Relations between the Government of the State of Israel and the Palestine Liberation Organization. The protocol is currently under re-negotiation. In this regard, we urge the Palestinian authorities to rectify some of the problems that arose from the protocol and contributed to a deterioration of the productive base. Such measures would include to give the PNA more breathing space with regards to strategically protect its manufacturing industry and enable the authorities to engage in infant industry protection (by adjusting tariffs on industrial goods as needed). Furthermore, a crucial part of negotiations should address the cumbersome administrative burdens that Palestinian importers and exporters face vis-à-vis their neighbouring competitors, which discourages production for exports and incentivises indirect imports from Israel (this includes a solution to the excessive constraints of movement for goods and people, which has been also repeatedly criticized by the World Bank, the IMF, and UNCTAD). Moreover, the issue of fiscal leakages needs to be resolved by pushing negotiations towards the development of a system, in which information on imports and exports between Israeli and Palestinian authorities will be exchanged efficiently. Finally, due to the excessive bilateral imbalances with Israel, the PNA should be allowed to gradually and strategically tax imported goods. These measures would strengthen the Palestinian productive capacities, whilst at the same time, only marginally affecting Israel’s economic development and public budget. Considering the benefits Israel can derive from more political stability in Palestine, the well-being and prosperity of one country is, in the long-run, inevitably tied to that of the other. We summarise some of the key points in our concluding section.

¹⁵ Article III, which formalises import procedures and trade standards, states in paragraph 15 that “the clearance of revenues from all import taxes and levies, between Israel and the Palestinian Authority, will be based on the principle of the place of final destination”. Thus, in cases where the import is carried out by an Israeli importer, yet the good is destined for the Palestinian market, the revenues collected belong to the PNA.

levies”. However, given the lack of control over its borders, and therefore crossing points of traded goods, Palestine entirely relies on the information provided by Israel (UNCTAD, 2014). Moreover, Israeli clearing agents and custom offices deny Palestinian authorities the entry to Israeli ports to clear imports and/or verify the information obtained. Due to the structure of the clearance system, and the restrictive practices set out in the protocol and manifested through Israeli occupation and military presence on the ground, fiscal leakages were identified as a major source of revenue losses soon after the ratification of the agreement (Al-Jawhari, 1995).

The specific origins of the leakages vary, yet access to information (i.e. clearance invoices) and Israeli non-compliance with official procedures remain a common feature. UNCTAD (2014) estimated that 40 per cent of total fiscal leakages occurs due to direct and indirect imports. As opposed to direct imports from third countries, indirect imports refer to imports of goods produced in third-countries but treated as if they were made in Israel.¹⁶ The remaining 60 per cent of leakages is attributed to the evasion of custom duties. The loss of indirect tax revenues (VAT and import taxes), which account for more than 85 per cent of total Palestinian tax revenues, consequentially creates a substantial gap in the Palestinian budget (ibid.). It should be noted that indirect imports are made possible by different regulatory practices in Israel and Palestine, as importers in the former (as opposed to the latter) are not bound to signing a declaration that confines the sale of imported goods to the domestic market only (World Bank, 2016).

Indirect imports allow the PNA to collect only VAT on imported goods, whilst the remaining custom duties are accrued to the Israeli Treasury. However, also the VAT collection itself, whose clearing mechanism is specified in the PP, is subject to a substantial amount of fiscal leakages. The regulations stipulate that VAT is required to be transferred to the administration where the payer is registered, so that the tax receipts ultimately depend upon the information provided in the clearing bills.¹⁷ Yet, if Palestinian traders decide to withhold respective documents, as it is often the case, Palestinian authorities have very limited options to attain accurate information, as the Government of Israel (GoI) does not share the copies of the clearing bills that are exchanged in cross border transactions (World Bank, 2016).¹⁸ Finally, additional losses occur where goods are smuggled across borders (ibid.).

As the Palestinian budget is heavily reliant on revenues from international trade, fiscal leakages substantially damage the PNA’s capacities to fund public expenditures and securely plan future investments. The estimations of the exact amount of the losses vary due to data constraints, but generally, they range from around USD 126 million (1995) to at least USD 310 Million in 2011 (equivalent of 3.6 per cent of GDP or 18 per cent of total tax revenues).¹⁹ In 2016, after international pressure on the GoI mounted, Israel reimbursed the PNA USD 300 million for a part of the fiscal leakages, yet the main problems, namely the outdated structure of the Paris Protocol, complete reliance on Israel for information, and the cumulative loss of revenues since 1994, remained unaddressed.

3.1.2. Dependence on Israel

¹⁶ For a more detailed taxonomy of indirect imports, we refer to UNCTAD (2014).

¹⁷ An additional regulation regarding VAT stipulates that Israel retains the right to unilaterally set VAT levels that the PNA has to comply with (VAT in Palestinian territories cannot deviate by more than 2 per cent).

¹⁸ A study by the IMF (2010), as reported in UNCTAD (2014), compared the numbers of bills issued by Israeli companies to Palestinian firms and found that between 30 and 70 per cent of the Palestinian bills were not submitted to the tax authorities, so that the PNA was unable to claim the VAT incurred. Even in cases where clearance bills were submitted, they have often been subject to forgery or other forms of manipulation (UNCTAD 2014; World Bank, 2016).

¹⁹ In some of the first estimates during the 1990s, Al-Jawhari (1995) and the Palestinian Ministry of Finance (1998) suggested that revenue losses might be in the range of USD 126 to 155 million (4-5 per cent of GDP) and USD 334 million (10 per cent of GDP), respectively. The World Bank (2002) estimated annual fiscal leakages of USD 133 million (3.2 per cent of GDP), excluding losses that occurred through smuggling. In 2004, UNCTAD identified based on then newly published data, that up to one third of imports from Israel might be indirect imports. Follow up reports by UNCTAD (2011, 2014) estimated the losses to the Palestinian budget in 2011 to exceed USD 310 million. Similarly, in 2016, the World Bank approximated annual fiscal leakages to be in the range of USD 285 million or 2.2. per cent of Palestinian GDP (excluding revenues collected by GoI in Area C due to data constraints). Finally, based on a report by the Bank of Israel (2010), Khalidi (2010) argued that forgone custom revenues amount to USD 600 million, whilst at the same time he found that Palestine runs a small bilateral trade surplus with Israel, if these indirect imports are taken into account.

Next to fiscal leakages, the PP cemented Palestinian dependence on Israel's economic policies (Samara, 2000; Arnon and Weinblatt, 2001; Samhoury, 2016; World Bank, 2017a). First, the resulting tariff structure of the customs union may be suited to an advanced economy such as Israel, but it is deeply inadequate for a developing country. The PP obliges Palestine, with partial exceptions, to apply Israeli import policies and maintain Israel's tariffs as a minimum base, without any right to initiate changes. This right was exclusively granted to Israel, which could, upon prior notification of the PNA, "introduce changes [from time to time], provided that changes in standard requirements will not constitute a non-tariff-barrier and will be based on considerations of health, safety, and the protection of the environment."²⁰ Over time, the administration of the customs union was gradually overtaken by unilateral and restrictive Israeli actions, which were often tied to Israeli security concerns and harmed the competitiveness of Palestinian producers (Khalidi and Taghdisi-Rad, 2009; World Bank, 2017b).

The Joint Economic Committee (JEC), formally established to mediate economic relations between the PNA and GoI, gave Israel de facto a veto right. Matters were further complicated by the fact that the JEC only met in a very interrupted manner. Since 2009, the committee is regarded to be effectively dead (World Bank, 2016). Within the current framework, it is at least questionable how policies that require the consent of the JEC, such as the introduction of a Palestinian currency, can bypass the requirements set out in the PP.²¹

Although paragraph 2 of Article III allows Palestine to independently set import policies for a range of goods specified in lists A1, A2, and B, the concessions made are meaningless for several reasons. First, the lists cover only a very small range of products that can be imported.²² Second, as the lists have not been substantially updated since 1994, the imported products that fall under the exemptions account for a miniscule share of Palestinian imports. Third, given that list A1 and A2 are subject to quota restrictions, and list B is subject to Israeli standards, even the exceptions granted are very restrictive.

Although the PNA is formally allowed to negotiate its trade agreements with third countries, which some institutions regard as proof of its autonomy and sovereignty (cf. WTO, 2009), the room to apply tariffs that diverge from those of Israel are very limited.²³ Furthermore, as the World Bank (2017a) notes, Israel does not recognise these agreements in practice anyway. Based on the current governance framework, therefore, Palestine must cope with Israel's low tariffs on manufacturing and industrial goods, and higher protectionism for agricultural produce (WTO, 2017). This impedes the prospects of a sovereign industrialisation while simultaneously increasing Palestinian dependence on Israel's agricultural output.

3.1.3. Disadvantages faced in regional competition and vis-à-vis Israel

The competitive disadvantages for Palestinian firms vis-à-vis their foreign competitors relate to several factors: (i) inhibited movement of goods and people within the occupied territory, (ii) deprivation of land and access to natural resources, and (iii) restrictive administrative obstacles set by Israeli authorities. Some of these problems are directly related to the PP, whereas others are the result of deliberate and unilateral Israeli actions. For reasons of clarity and convenience, the implications of both will be considered in conjunction.

The first disadvantage of Palestinian producers relates to the physical movement of goods and people. As the PP was explicitly based on grounds that would defer any final discussions of border issues, one

²⁰ Cf. Article III, paragraph 10.

²¹ Cf. Article IV, paragraph 10.

²² List A1 and A2 cover a small range of raw materials and agricultural products that can be imported from Egypt and Jordan (A1) as well as third countries (A2). List B specifies an even narrower range of capital goods, equipment, and pharmaceutical products that are allowed to deviate from Israel's tariff structure.

²³ Even the European Union, with whom Palestine entered into a bilateral trade agreement in 1997, acknowledges that the Paris Protocol "allows the Palestinian Authority to establish trade relations with third countries, provided that such agreements do not deviate from Israel's import policy" (European Commission, 2018, italics added).

of the main sources of the tensions between the Israeli and the Palestinian side was not settled, and Israel has retained full control over all checkpoints at the borders to this day. After the failure to negotiate a final agreement during the interim period, which culminated in the collapse of the Camp David negotiations, relations between Israel and Palestine substantially deteriorated with the outbreak of the second intifada in September 2000. Due to security concerns, Israel began to impose draconian measures to control the movement of Palestinian goods and people, which led to severe economic hardship in Palestine (World Bank, 2007). A follow up agreement in 2005, the Agreement on Movement and Access (AMA), sought to ease the conditions in Palestine and relax the measures imposed by Israeli authorities. Yet, with the Palestinian division since 2006, any progress was effectively reverted, while the Israeli siege on Gaza led to a full-blown humanitarian and economic crisis there.

Even though the restrictions on the movement of goods and people in the West Bank were eased from the late 2000s on, the remaining obstacles still pose an overwhelming barrier for efficient production and trade. Far from the stipulations outlined in the Oslo Accords to facilitate the movement of goods and people,²⁴ the reality on the ground is vastly different. Regarding physical obstacles alone,²⁵ World Bank data show that Israel has erected more than 540 barriers in the West Bank (excluding checkpoints along the Green Line, which constitutes the internationally recognised border), whereas other reports suggest even higher numbers (UNSCO, 2017). For an area of 5,650 square kilometres,²⁶ this poses excessive obstacles to develop a smoothly functioning economy. The World Bank (2017a) concludes in its latest report on Palestinian trade that these physical restrictions “have imposed prohibitive transaction costs on Palestinian exporters and importers, [which] weakened the competitiveness of Palestinian goods, with trade barriers of greater effect than tariffs.” (p. 11)

Second, Palestinian producers have to cope with Israeli annexation of highly productive land,²⁷ restricted access to natural resources, and deliberate destruction of Palestinian assets.²⁸ The most adversely affected sector of these measures is Palestinian agriculture, as the expansion of Israeli settlements into the West Bank and the construction of the separation barrier, of which 85 per cent were built east to the Green Line (constituting the “seam zone”), deprived Palestine of some of its most fertile land (Samhuri, 2016). Thousands of Palestinian who own the land behind the separation barrier can only access it after obtaining specific permits, which entails a lengthy administrative process that mostly ends in rejected applications (World Bank, 2009). For those who manage to obtain a permit, restricted opening hours for crossing the gate village apply (World Bank, 2009; 2017).

Furthermore, as the seam zone contains most of the water resources and aquifers, but remains detached from Palestinian territory, access to water for Palestinians is restricted,²⁹ which, in turn, further hampers agricultural production (World Bank, 2009). Given that irrigated agriculture

²⁴ The Oslo Accords state that “movement of people, vehicles and goods in the West Bank, between cities, towns, villages and refugee camps, [should] be free and normal, and (...) not need to be effected through checkpoints or roadblocks” (Annex I, Article IX, Paragraph 2).

²⁵ These barriers include “checkpoints, road gates, roadblocks, earth mounds, trenches, road barriers, and earth walls” (World Bank, 2017a, p. 11).

²⁶ Data from UNRWA; UNSCO (2017) figures count 572 barriers (excluding Hebron, which accounts for 997 out of the total 5.650 square km).

²⁷ Overall, since 1967, UNCTAD (2018) estimates that “Palestine has lost access to more than 60 % of its land in the West Bank and two thirds of grazing land”, whilst in Gaza, Palestinian producers cannot access more than half of the cultivated land. With regards to fishery, military control of the sea territory off Gaza prevents Palestinians of exploiting the resources to which they were entitled under the Oslo-Accords (Samhuri, 2016).

²⁸ UNCTAD (2017a) reports that Palestinian in the West Banks are often exposed to violence by settlers and the destruction of productive assets. For example, the production of olives-based produce, which UNCTAD (2011) identified as a sector for export promotion (and which accounted for 2-4 per cent of Palestinian merchandise exports between 2007 and 2017, based in UN Comtrade data), was significantly impeded by the fact that in 2016 alone, more than 1.500 olive trees were damaged or fully uprooted by settlers (in addition to the 2.5 million productive trees that have been uprooted since 1967). Due to the existence of two parallel legal systems in the area, which make Palestinians subject to Israeli military law, the room for successful litigation is limited (UNCTAD, 2017a).

²⁹ It should be noted, however, that water supply was unequally distributed through the stipulations set out in the Oslo-Accords. Whilst Israel was granted full control of all water resources and an unlimited water supply, Palestine’s supply was capped to a predetermined quantity of roughly 220-230 MCM (118 MCM from existing drilling, 70-80 MCM from new drillings, and extra Israeli sales of 31 MCM of water; cf. B’Tselem, 2017).

contributed a significant part of employment,³⁰ and could therefore play a key role in economic development, the dwindling water supply constitutes a severe economic constraint.

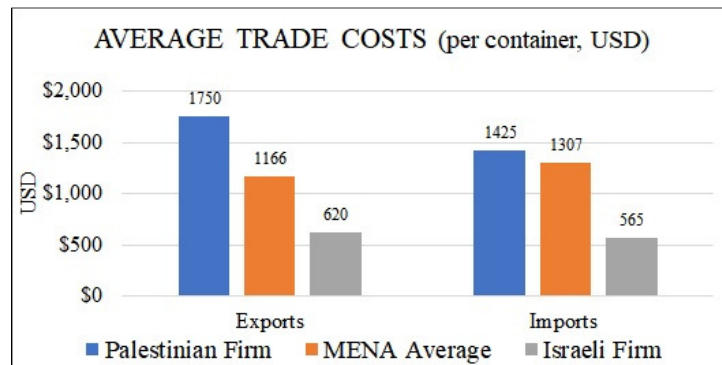
Third, due to the application of the Israeli custom rates and purchase taxes for Palestinian producers, without considering the different stages of development, Palestinian firms have a substantial competitive disadvantage vis-à-vis their Israeli counterparts (UNCTAD, 2014). The latter often benefit from subsidies (and/or technological spill-overs from the Israeli military), operate with scale benefits, and do not face any administrative complications in trade and transportation. Additionally, agricultural producers in Palestine are exposed to Israeli non-tariff barriers in form of very strict health and sanitary standards. These absolute advantages thus incentivise indirect imports from Israel or smuggling.

Moreover, the quotas and high costs placed on intermediate and capital goods further exacerbate the situation for Palestinian firms (UNCTAD, 2014). Especially restrictions on so-called “dual-use” items, which are classified as civilian goods that could have a military purpose, increase the difficulties of obtaining a critical input goods for industrial production (Samhoury, 2016). Notwithstanding the enhanced effectiveness of PNA’s security efforts and relative improvements of the political situation, the GoI has expanded the list over time (Nashashibi, 2015).

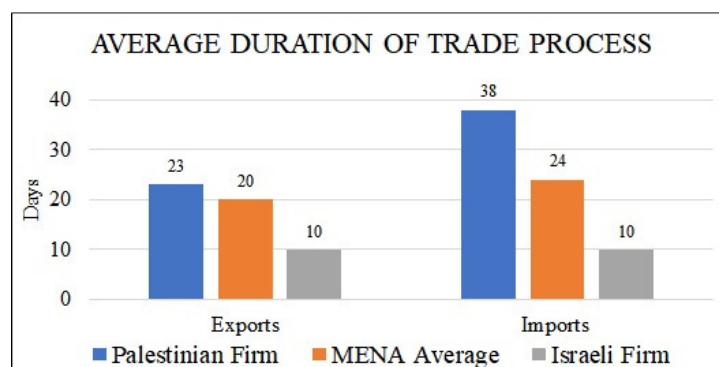
Finally, in addition to above regulatory barriers, costly border procedures and thus high transportation costs, as well as overly complicated administrative requirements (incl. restrictions on business and travel visas) increase transaction costs for Palestinian firms and impede trade with their Arab neighbours (World Bank, 2002; UNCTAD 2014). If Palestinians want to import merchandise, they need to renew their license each time, whereas Israeli businesses are granted licenses for one year (World Bank, 2016). At times, obtaining the import authorisation can take weeks. The same applies to standard licensing, which is a prerequisite for trading goods. Furthermore, the regulations for direct importing, which are mostly revised by Israeli authorities, are often available in Hebrew only, posing a significant language barrier for Palestinian importers to meet regulatory standards (ibid.).

Not only vis-à-vis Israeli firms, but also against other regional competitors, doing business in Palestine comes at a much higher price. Data from the World Bank (2017a) illustrate the extent of the disadvantage. Average trade costs for imports and exports (per container) roughly exceed those of Israeli firms by a factor of three, whereas the duration of import and export clearance takes twice or even four times as long.

Figure 8: Trade Costs and Process Duration



³⁰ 117.000 people in 2009, according to World Bank (2009).



Source: World Bank (2017a, p. 44).

In sum, therefore, the outdated and restrictive governing framework of Israeli-Palestinian economic relations, combined Israeli-imposed measures and unilateral actions, are the most important *single* determinants of the Palestinian economic malaise. High transaction costs and uncertainty lowered the horizon of Palestinian firms and effectively discouraged productive investments. Furthermore, the restrictions set in the Paris Protocol and Israeli border procedures limit the scope of developing trade relationships with third parties, whilst at the same time, incentivising indirect imports and informal transactions.

3.2. Trends and trajectories of Palestinian trade

3.2.1. Palestinian trade outcomes and relationships

As a corollary of the restrictive economic governance framework presented above, Palestine had to cope with persistent fiscal, current account, and trade deficits (cf. Elmusa and El-Jaafari, 1995; UNCTAD, 2006; PMA, 2016a; World Bank, 2016; IMF, 2017). However, despite the difficult circumstances, the PNA has managed to substantially reduce its current account and trade deficit relative to economic output – albeit the size of these deficits remains unsustainable.

Even though trade deficits are a common feature of many developing countries, Palestine’s trade deficit in relation to its GDP is disproportionate even in comparative terms (cf. table 1). In most cases, it exceeds that of the other countries in the sample by a factor of (at least) two. The data further suggest that the size of the deficit is not mainly due to an overly excessive amount of imports relative to Palestine’s GDP, but rather a result of the low share of exports.

Table 1: Palestinian Trade Outcomes (goods and services)

Country	GDP	GDP PPP	Exports	Imports	Trade Balance	Exports	Imports
	(mio. 2015 USD)	(per capita, USD)	(in mio. USD)	(in mio. USD)	(relative to GDP)	(in % of GDP)	(in % of GDP)
Palestine	12680	5080	2322.7	7501.7	-0.41	18%	59%
Median	12686.5	8611	4937.3	7263.9	-0.185	37%	57%
Albania	11393	11284.4	3104	5069.4	-0.17	27%	44%
Armenia	10529	8492	3137.4	4418.4	-0.12	30%	42%
Bosnia	16251	4206.6	5603.8	8625.9	-0.19	34%	53%
Georgia	13996	9600.8	6288.4	9062.4	-0.2	45%	65%
Honduras	20729	5093.8	9520.5	13059.3	-0.17	46%	63%
Jamaica	14218	8771.9	4250.8	6441.4	-0.15	30%	45%

Country	GDP	GDP PPP	Exports	Imports	Trade Balance	Exports	Imports
	(mio. 2015 USD)	(per capita, USD)	(in mio. USD)	(in mio. USD)	(relative to GDP)	(in % of GDP)	(in % of GDP)
Jordan	37517	8730	13362	23495	-0.27	36%	63%
Moldova	6496	1828.3	3568.3	5817.9	-0.35	55%	90%
Mongolia	11718	12178.5	5283.8	4943.5	0.03	45%	42%
Namibia	11497	11224.4	5121.5	7885	-0.24	45%	69%
Nicaragua	12693	5200.3	4753.1	7026.1	-0.18	37%	55%

Source: World Bank (2015, p. 9).

Concomitant with the problematic development of the Palestinian trade balance is its excessive dependence on Israel. As outlined above, this uneven relationship compounds Palestinian dependence unilaterally, with little to no benefits for the Palestinian economy, but substantial gains for Israel. Whilst Palestine runs most of its deficits through trade with Israel, the latter is able to employ active industrial policies and take advantage of the conditions in Palestine. Furthermore, also because the productive basis of the Palestinian economy has substantially eroded (cf. section 2), the income of Palestinian workers is largely spent on the consumption of Israeli goods, which further encourages imports from Israeli (UNCTAD, 2011).

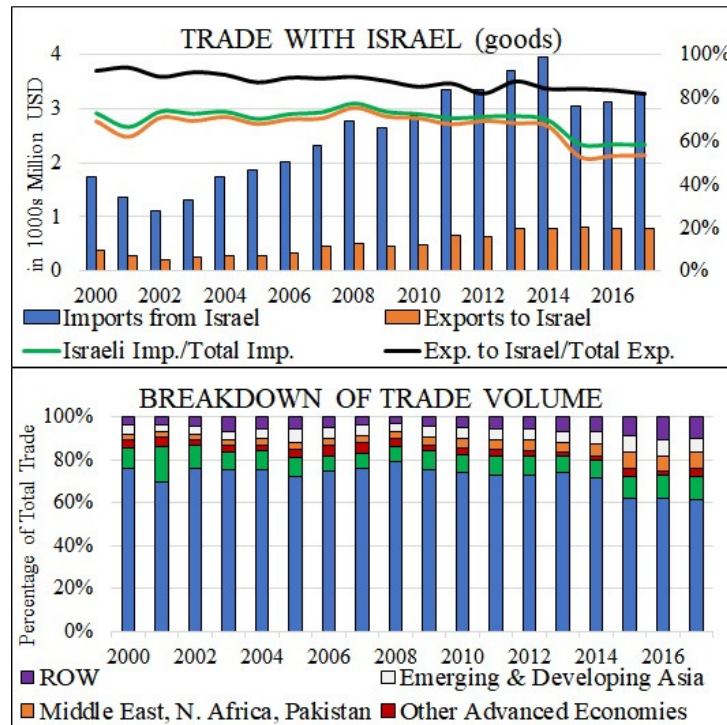
Due to the disproportionate amount of bilateral trade in total trade, Palestine's relationship with Israel explains the vast majority of its overall trade outcomes. It is noteworthy, however, that the share of bilateral trade fell from some 75 per cent of total trade in 2000 to 61 per cent in 2017, as shown in figure 9. Even though this might be regarded as declining dependence on Israel, it is more likely that mere administrative and formal adjustments are responsible for the decline. Historically, the official share of bilateral trade continuously accounted for at least 70 per cent, with trends in the data not indicating any significant changes. Yet, after 2014, there is a discontinuity for imports, whereas no such clear break is visible for exports. One possible explanation for this is after international institutions exposed the extent of indirect imports and practices of fiscal leakages by Israeli authorities (most notably UNCTAD, 2014), pressure on the GoI mounted to declare the goods that are destined for the Palestinian market as such (World Bank, 2016). Thus, a more accurate declaration or stricter application of country-of-origin rules during that time, rather than more fundamental and qualitative changes in Palestinian trade relationships, could explain the observed drop.³¹

Notwithstanding the declining share of Israeli imports, the share of Palestinian exports to Israel amounts to more than 80 per cent. This further illustrates the gravity of Palestinian dependence, especially as it is likely that this figure is more accurate than corresponding import values. Next to the structure of the dysfunctional customs union and Israeli-imposed restrictions, which impede Palestinian exports to third markets, a multi-layered and complex relationships of Palestinian and Israeli businesses have emerged over time. Often, Palestinian firms thereby function as subcontractors to Israeli companies. However, the restrictive regime also led to the emergence of a much wider range of informal relationships, especially in cases where Palestinian businesses merely need a rather small quantity of input goods. Through obtaining these goods directly from Israeli importers, Palestinian businesses can bypass complicated and time-consuming procedures (Samara, 2000; UNCTAD, 2014).

³¹ Although it is likely that indirect imports have distorted Palestinian imports from from Israel throughout the entire period of investigation, determining an accurate figure is impossible given the data constraints. Several studies though allow for a crude estimation of the order of magnitude, which is substantial in any case. Based on a report by the Bank of Israel (BoI), Samhuri (2016) finds that in 2008, 58 per cent of all Palestinian imports from Israel were indirect imports. Excluding water, electricity, and fuel, the World Bank (2016) estimates this figure to be 35 per cent.

Table 2 summarises the regional distribution of import and export shares for the years 2010-2014, confirming that, while Israel accounts for the vast majority of Palestinian trade, the trade links to other regional as well as potential overseas partners are negligible.³² Combining these insights with the data in figure 9, it is also evident that bilateral trade agreements that the PNA signed over time did nothing to change the overall patterns.

Figure 9: Palestinian Trade



Source: Direction of Trade Statistics (IMF).

3.2.2. Israeli trade outcomes and relationships

In stark contrast to Palestinian trade outcomes, Israel’s trade is rather balanced, despite a slightly widening deficit over the past years. Although Israel does not provide data for exports to Palestine, the DOTS statistics as well as World Bank (2017a) data allow for a crude estimate of the importance of Palestine as a trading partner. Figure 10 thereby indicates that imports from Palestine play a miniscule role in total Israeli imports, yet with regards to Palestine as an export market, the share is substantially more pronounced. According to IMF and OECD data, between four and six per cent of total Israeli exports are destined to the Palestinian market,³³ whereas the World Bank (2017a) estimates a share of 5 per cent. This places Palestine among the top three Israeli export partners between 2010 and 2014, and accounted, on average, for 1.3 per cent of Israel’s GDP in that period (ibid.).

³² The deviations in the data below from the bilateral data presented earlier is due to different data bases on which the calculations rely. The data presented in table 2 is derived from the UN Comtrade Database, whilst our analysis above was based on the Direction of Trade Statistics (DOTS). As the overall trends and the order of magnitude remain very similar, this confirms the validity of the findings above.

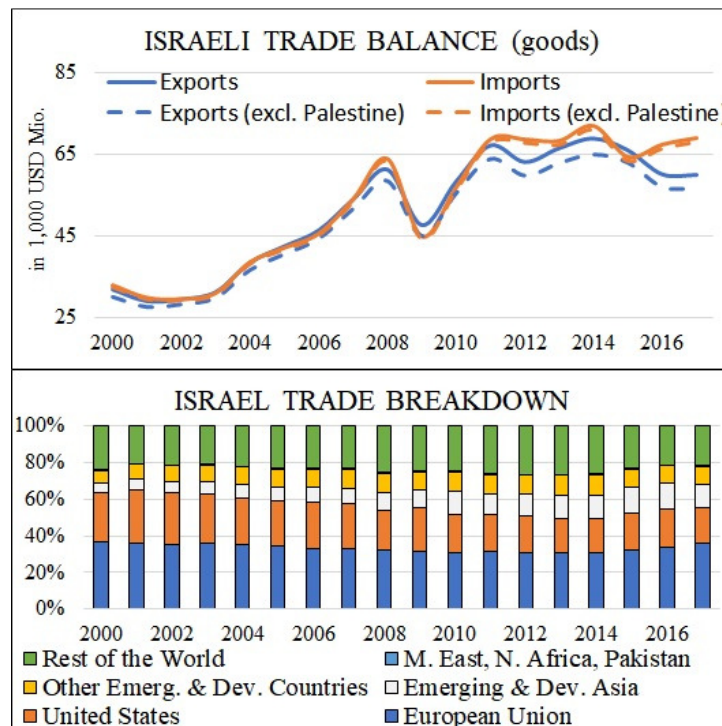
³³ See Appendix B for details.

Table 2: Top Five Palestinian Import and Export Partners

Top 5 Palestinian Import Partners					
	2010	2011	2012	2013	2014
1	Israel (67.3%)	Israel (64.9%)	Israel (65.5%)	Israel (65.8%)	Israel (63.2%)
2	China (5.4 %)	Turkey (5.7 %)	Turkey (5.9%)	Turkey (6.7 %)	Turkey (6.9 %)
3	Turkey (5.4 %)	China (5.3%)	China (5.1%)	China (5.5%)	China (6.0%)
4	Germany (2.1 %)	Germany (2.8 %)	Germany (3.0 %)	Germany (2.9 %)	Germany (3.0%)
5	Jordan (2.1%)	Jordan (2.5%)	Jordan (2.6%)	Jordan (2.2%)	Jordan (2.2%)
Top 5 Palestinian Export Partners					
	2010	2011	2012	2013	2014
1	Israel (79.0%)	Israel (79.3%)	Israel (74.8%)	Israel (82.3%)	Israel (78.8%)
2	Jordan (7.2%)	Jordan (7.7%)	Jordan (9.9%)	Jordan (8.4%)	Jordan (8.6%)
3	UAE (2.9 %)	Saudi Arabia (1.8%)	UAE (2.6%)	United States (1.2%)	UAE (2.1%)
4	United States (1.8%)	UAE (1.8%)	United States (2.5%)	Saudi Arabia (1.6%)	United States (1.8%)
5	Saudi Arabia (1.4%)	Algeria (2.0%)	Qatar (2.0%)	Qatar (1.3%)	Saudi Arabia (1.6%)

Source: World Bank (2017a).

Figure 10: Israeli Trade Balance



Source: Direction of Trade Statistics (IMF).

Needless to say, the much more advanced state of the Israeli economy as well as its autonomy over tariff policies allow for a much more diverse and sophisticated integration into the global economy, which is reflected in Israel's strong links with advanced economies (cf. table 3). In summary, therefore, the trade data of both economies simply highlights the divergent productive capacities and the dysfunctionality of the current economic governance structure.

3.3. Composition of trade

One of the main characteristics of Palestinian development is the erosion of the productive base. As shown in section 3.1, the combined effects of a restrictive governance regime and Israeli occupation have suffocated the Palestinian tradable goods sector by putting domestic firms at a significant disadvantage vis-à-vis their foreign competitors. Cumulatively, the consequences of these competitive disadvantages aggravated the situation for the entire economy.

Table 3: Top 5 Israeli Export Partners

	2010	2011	2012	2013	2014
1	United States (36.2%)	United States (34.4%)	United States (33.7%)	United States (33.5%)	United States (34.7%)
2	Palestine (4.9 %)	United Kingdom (5.3 %)	United Kingdom (5.5 %)	Palestine (5.4 %)	Palestine (5.9 %)
3	China (4.4 %)	Palestine (4.9 %)	Palestine (5.1%)	China (4.7%)	Hong Kong, China (4.9%)
4	Belgium (4.3 %)	China (4.5 %)	China (4.5 %)	Hong Kong, China (4.3%)	China (4.7%)
5	United Kingdom (4.2 %)	Hong Kong, China (4.4%)	Hong Kong, China (4.1%)	United Kingdom (4.1%)	Turkey (4.3%)

Source: World Bank (2017a)

Section 2.1.2, has already illustrated the degree of the deindustrialisation and the decline of agricultural production – hence the deterioration of the two most important sectors for economic development. Given the weak productive base, high transaction costs, and the absence of a development strategy, the composition of Palestinian exports is marked by no coherent specialisation in strategic sectors as well as low-technology/high-resource contents. Particularly when compared to the composition of Israeli exports, the stark differences between the two economies become clear. Figure 11 and 12 illustrate the share of respective product categories in total imports and exports for both Palestine and Israel over time.

According to the data, Palestine’s imports are concentrated on mineral products. Thereby, in 2016, electricity, refined petroleum, and cement accounted for around 20 per cent of all imports – most of which were coming from Israel. The remaining categories make up *comparatively* little of Palestine’s imports, with foodstuffs (i.e. animal food, tobacco, and water),³⁴ machines (i.e. broadcast equipment, refrigerators, and computers) and vegetable products (i.e. wheat, rice, and fruits) accounting for around respectively 10 per cent of total imports in recent years. As the dots, indicating the year and size of the share in total imports, remain very close together throughout all product categories, this implies that since 2007, the basic HS2-specified composition of imports has not changed significantly.

With regards to exports, concentration is particularly high in building stone (more than 17.5 per cent of total exports in 2016), furniture, and other labour-intensive and primary resource-based products (i.e. metals, plastics/rubbers, vegetable products, and foodstuffs). Conversely, the share of more complex and capital-intensive industrial products, such as transportation goods, chemicals, instruments, or machines, remains miniscule throughout. The wider spread of the dots in combination with no coherent sequencing of their colours, underlines the rather arbitrary and volatile nature of Palestinian exports.

Israel’s trade composition, in contrast, is markedly different. With regards to imports, machines and mineral products play a primary role. Also, imports of diamonds for further processing are substantial, although the share of both imports and exports of precious materials remains volatile due to the price elasticity of luxury goods. In terms of exports, capital-intensive and high-tech goods, such as

³⁴ The products in the brackets are the top three HS4 specified products in the given category.

machines (esp. integrated circuits) and chemical products (esp. medicaments, pesticides and fertilisers) stand out, whereby there appears to be an increasing specialisation in the former.

Thus, the composition of trade highlights the vastly different stages of economic development of both economies, and Israel's specialisation in strategic key sectors. The strategic direction of the Israeli economy is backed by an active state, in particular through military spending and other forms of industrial policy (incl. erection of non-tariff barriers), which creates spill-overs to other sectors (Breznitz, 2006). According to trade theory, a country's trade composition will reflect its comparative or absolute advantages. In the case of Palestine, none of this applies. The trade composition is a result of Israeli politics, a distorted institutional framework, and a gradual depletion of productive capacities.³⁵

Figure 11: Composition of Palestinian Trade (HS2)



Source: UN Comtrade, extracted from the Observatory of Economic Complexity (OEC).

³⁵ For specific measures to rectify this dysfunctional structure, we refer to UNCTAD (2011) and PMA (2016a).

Figure 12: Composition of Israel's Trade (HS2)

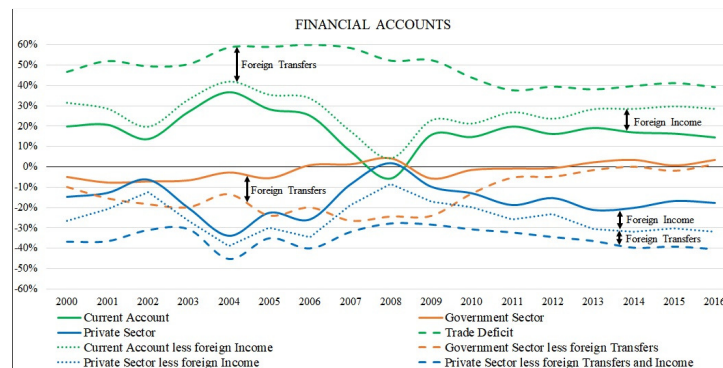


Source: UN Comtrade, extracted from the Observatory of Economic Complexity (OEC).

4. Financial accounts

As transactions in a monetary economy imply that one sector's spending is another sector's income (and vice versa), the financial account balances of the Palestinian economy reflect findings above. The accounts presented below illustrate, more specifically, which sectors take on net-lending (i.e. saving) and which sectors hold net-borrowing positions. Since there is no surplus or deficit position for the world as a whole, all balances must sum up to zero. Two conclusions that are derived from the Palestinian sectoral balances stand out. First, the reliance on consumption combined with excessive trade deficits leads to an absence of domestic savers. Second, the data show that both the private and the public sector are heavily dependent on inflows of foreign currency. Both findings have important implications for conclusions in later sections.

Figure 13: Financial Accounts



Source: PCBS, National Accounts; Balance of Payments; Own Calculations.

Notes: The share of private and public net current transfers is estimated, using the data on the inflows of transfers from the Balance of Payments Account.

To provide a deeper understanding of Palestinian economic development, figure 13 shows the balances of the three main sectors of the economy: the government, the private sector, and the foreign sector. To emphasise the role of foreign capital, the research here has disaggregated the financial accounts based on whether the respective sector includes or excludes foreign transfers and income. Thereby, the solid lines indicate the official financial accounts of all sectors, whilst the dashed and dotted lines represent the accounts without foreign transfers and foreign income respectively. Values above the zero per cent line imply a net accumulation of financial assets, whereas values below zero can be interpreted as net accumulation of financial liabilities. Since assets and liabilities net each other out, private sector net liabilities were derived by subtracting the current account from the government deficit.

The solid lines show that the current account deficit, averaging at about 18 per cent between 2000 and 2016, poses a major problem for the Palestinian economy. As the current account reflects the result of capital flows from international trade plus net transfers (i.e. interest and profit receipts), a deficit of this size implies a substantial accumulation of financial liabilities vis-à-vis the rest of the world. Yet, given that the government deficits are rather small (-1.8 per cent on average), the vast burden of the accumulation of liabilities, averaging around 16 per cent of GDP, falls onto the private sector.

One prima facie surprising feature of these accounts is that in 2008, *all* sectors were nearly balanced. Yet, the official accounts are massively distorted by foreign capital flows.³⁶ Once foreign transfers and income are deducted from the official financial accounts, the situation looks considerably worse.

³⁶ Thereby, net transfers refer to financial inflows such as remittances, donations, foreign aid and grants. Foreign income, on the other hand, is almost entirely constituted by salaries of Palestinian workers in Israel (96.7 per cent of net income in 2016). The latter makes the Palestinian economy vulnerable to shocks on the Israeli labour market and exacerbates the problem of excessive bilateral trade imbalances, as these remittances play a key role in financing imports from Israel.

Without foreign transfers, which are primarily donations and remittances, the domestic government deficit would have amounted to more than 25 per cent in 2008. Furthermore, in the run-up to the global financial crisis (GFC), the sharp increase in aid and remittances helped the Palestinian economy to reduce its current account deficit, whilst still running a massive trade deficit. This bizarre constellation was completed by the fact that higher public spending in combination with higher foreign transfers equally allowed the private sector to reduce its deficits (although, without these transfers, the deficit of the private sector would amount to 35 per cent on average throughout the whole period).

In the aftermath of the GFC, foreign transfers markedly declined, which reduced the overall volume of foreign inflows and increased the relative importance of foreign income.³⁷ The decline in revenues forced the government to reduce its spending and drove the private sector into a higher deficit. Given the weak domestic private investments, a large share of this deficit is imputable to private debt, financed by bank loans. Also, as the PNA's adjustment to the income shock included the deferral of payments to civil servants, domestic workers had to take on loans to secure liquidity and pay for ongoing expenses. Sections 5 and 6 provide further evidence for these conclusions, yet at this stage it is important to consider the tremendous role of foreign transfers and income in the Palestinian economy.

In addition to the dependence on foreign capital inflows, further implications for the monetary system in Palestine arose due to the fact that a current account deficit entails either a decline in foreign assets or an increase in external liabilities, which is reflected in the capital and financial accounts of the balance of payments statistics. Net capital transfers, captured by the capital account, include transfers of ownership of fixed assets or debt forgiveness. The financial account, on the other hand, comprises, *inter alia*, foreign direct investments (FDI), portfolio investments, and changes in reserve assets.

The literature generally refers to three ways of financing a current account deficit: FDI, external debt, and selling reserve assets. FDI are most commonly regarded as the optimal 'financing source' for a current account deficit, as they are generally associated with a longer-term outlook and do not add to national debt. If embedded in a coherent development strategy, FDI can additionally foster productivity and real GDP growth through technological change and a modernisation of productive structures. However, without strategic deployment, FDI can adversely affect economic development.³⁸ Other means of financing the deficit will necessarily affect foreign assets or external liabilities. These include portfolio investments, which comprise cross-border investments in equity and debt securities, such as money market debt instruments and financial derivatives, but also longer-term debt, and other investments, which residually refer to changes in the stock of cash of foreign currencies in domestic banks and the deposits of Palestinian institutions held abroad, as well as loans and deposits of non-residents deposited in local banks.³⁹

Figure 14, showing the composition of the capital and financial accounts, illustrates that the bulk of the Palestinian current account deficit is financed by capital transfers and other investments. This composition creates potential vulnerabilities in the domestic banking system, as deposits can be easily withdrawn in case of declining confidence, which could tear a hole in the financial account that might lead to a fall in reserve assets. Whilst much of the current account deficit is financed by other investments and capital transfers, FDI flows are of minor importance. Furthermore, a more detailed breakdown reveals that these 'other investments' and capital transfers largely comprise the liquidation of Palestinian bank's foreign assets and capital grants. Moreover, it appears that Palestine increasingly

³⁷ It should be noted that foreign income is not a reliable source for funding the current account, as it strongly depends on political stability. Given the situation in the Near East, frequent border closures can make it difficult to for Palestinians to access their workplace in Israel.

³⁸ See Wade (2010) for further discussion.

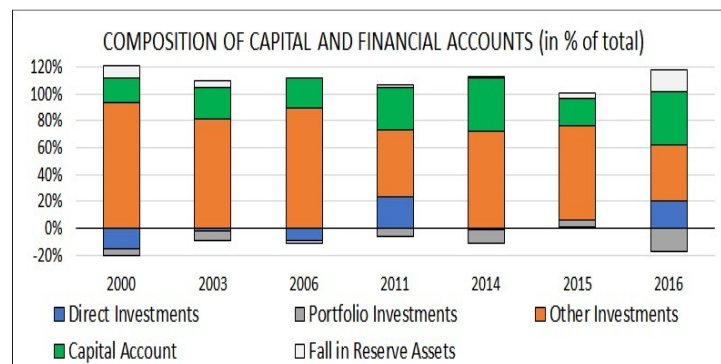
³⁹ If a Palestinian consumer, for instance, buys a foreign product, his/her Palestinian bank account is charged, so that his/her deposits decrease. The corresponding amount is credited to the deposits of the foreign producer, who holds an account at a foreign bank. To fill the gap in the balances of both banks involved in the transaction, the foreign bank could hold deposits at the Palestinian bank or both may arrange a credit contract. Finally, a country's financing gap might also be covered by selling reserve assets of the PMA, as long as the PMA is not running out of foreign reserves.

uses reserve assets for financing the current account deficit. In 2016 alone, the reserve assets of the PMA shrank by 268.1 Mio. USD. However, as the PMA cannot create reserves in a national currency, the trade and current deficits continue to diminish the amount of foreign assets (rather than allowing for the accumulation of further reserves), so that the sustainability of this form of deficit financing is severely limited.⁴⁰

With respect to the fiscal, current account, and trade deficit, several economic studies, most notably those conducted by the IMF and the World Bank, tend to focus on the fiscal deficit as they regard it as the root cause of the current account and trade deficits. The underlying theory implies that, if national savings are not sufficient to cover national investment, the emerging internal imbalances will create/drive external imbalances, which can be manifested, inter alia, in a current account or trade deficit (Metaxas and Weber, 2016). Thereby, based on a loanable funds framework, the neoclassical proposition of the twin deficit hypothesis suggests that fiscal deficits will decrease the amount of savings and thus lead to higher interest rates, which will in turn attract foreign capital and generate a surplus in the capital account (that corresponds to the deficit in the current account). Hence, the policy recommendations stress the importance of achieving fiscal sustainability, without necessarily considering the more fundamental problems of the Palestinian economy (i.e. IMF, 2017, 2018; World Bank, 2018).

Given the flawed theoretical and empirical underpinnings of the neoclassical hypotheses, this study rejects the argument that it is primarily the budget deficit which drives the current account and trade deficits (McLeay et al., 2014; UNCTAD, 2017b). Instead, it follows UNCTAD (2017b) in regarding the deficits as symptoms of deeper, structural problems of the Palestinian economy, as pointed out in section 3.

Figure 14: Balance of Payments Statistics



Source: PCBS, National Accounts; Balance of Payments; Own Calculations.

⁴⁰ This is partly driven by a re-classification of PMA's reserve assets, which does not, however, invalidate the general argument, that Palestine is losing reserves, when running a current account deficits.

5. Fiscal conditions

The fiscal condition of the State of Palestinian, which is presented in this section, has, based on certain measures, considerably worsened since 2008. Several key aspects stand out in this regard. First, and most importantly, the decline in foreign grants and donations led to an overall reduction of Palestinian public expenditures. Second, because of that, the relative importance of clearance revenues has increased. Due to repeated Israeli suspension of these revenues, this development heightens the dependency on the GoI and exacerbates the uncertainty for budgetary planning. Third, as already noted in section 2, wages and financing operational costs absorbed most of public spending, whilst development expenditures became increasingly marginalised. Finally, as the cuts in public spending were insufficient to cover actual payment commitments, the decline in fiscal revenues led to the accumulation of arrears. In particular, given the dire state of the productive basis and the persistently high current account and trade deficits, the pace of the accumulation of arrears makes the situation alarming.

5.1. General development: revenues, expenditures and debt ratio

Based on official measures, the fiscal condition of the Palestinian state is solid. Especially the overall decline in the deficit, brought about by a reduction of spending, is something international organisations strongly acknowledge as a positive sign (IMF, 2017; 2018). In 2016, Palestine's public deficit –before grants – even shrunk to a mere 2.4 per cent (from 5.6 per cent in 2015). Yet, as UNCTAD (2017a) notes, this does not point towards improved soundness of Palestinian public finances, as large one-off payments for telecommunication licensing fees (USD 145 million) and the aforementioned reimbursements for fiscal leakage (USD 300 million) obfuscate the scale of the actual financing gap. Moreover, the government deficit must be analysed within the wider context of Palestinian economic development, in order to make a qualitative judgement as to whether the fiscal conditions are sustainable.

First, regarding the composition of revenues and their effects on public expenditures, figure 15 indicates that clearance revenues as well as grants and donations determine public spending as a share of GDP. Given the findings in section 4, which demonstrated the reliance of the Palestinian budget on foreign aid and remittances, the broader conclusions are therefore not surprising. However, a remarkable new insight is certainly the extent to which changes in clearance revenues and grants and donations seemingly predict public expenditures. As tax and non-tax revenues only cover a minor share of total revenues and public spending, the correlation coefficient between public expenditures and the share of income obtained from clearance revenues and grants and donations is 0.89.⁴¹ Figure 15 illustrates this relationship in more detail and shows that if an increase in one of these crucial revenue sources cannot offset a decrease in the other, public expenditures will fall. Also, as evident from the graphs, the trends in the composition of revenues indicate a strong increase in the relative importance of clearance revenues, whereas grants and donations have declined to the low level of tax and non-tax revenue contributions. From an estimated value of NIS 2.496 million in 2016, PMA (2016a) predicted a further decline in foreign grants by 14.5 per cent.

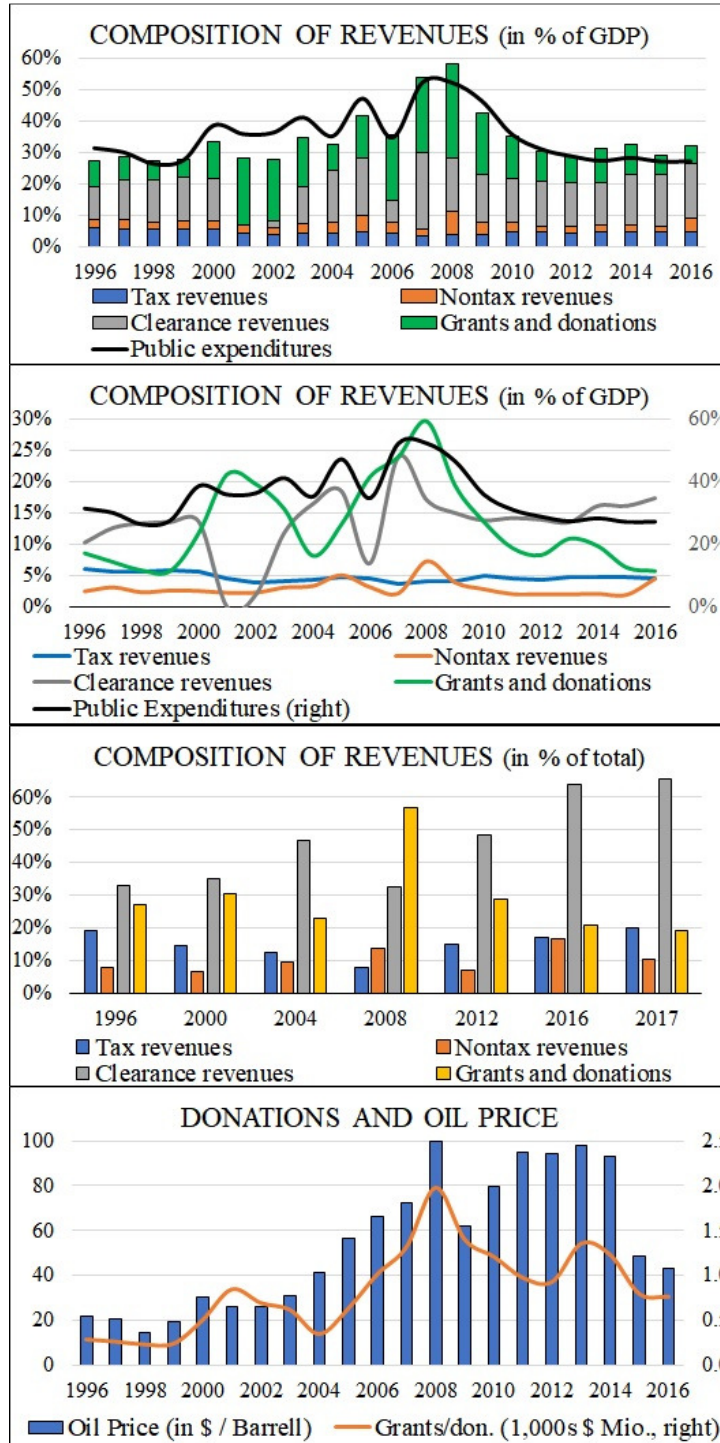
The high dependence on clearance revenues and grants and donations is not sustainable for several reasons. First, as Arab nations account for a large share of donations to the PNA, the amount of donations and grants will be determined by their own public revenues, which are, in turn, highly correlated with the oil price (cf. figure 15, bottom right). Even though the link has weakened during the past years, the overall correlation appears nonetheless robust.⁴²

⁴¹ Pearson Correlation Coefficient, 2001 excluded due to missing data for clearance revenues.

⁴² Hamed (2017) observed similar patterns and provided data based on which Arab-oil exporting countries accounted for roughly 35–46 per cent of the share in the PNA's budget support. Notwithstanding the correlation between the oil price and donations from Arab countries, however, other uncorrelated factors, such as the global financial crisis and changes in international community support (related to the election of Hamas) also substantially affected the PNA's income from grants and donations.

On top of the dependence on oil price developments, further problems might arise through shifts in geopolitical power relations under the Trump administration. Recent (resurgent) US support for Israel combined with strong traditional American relations with key players in the Middle East, at least imply the possibility that regional support to Palestine might dwindle or be tied to harsh conditionality.

Figure 15: Composition of Revenues



Source: PCBS, National Accounts; PMA; FRED; Own Calculations.

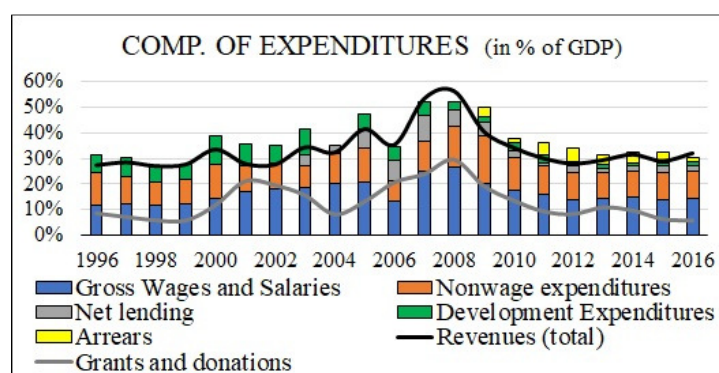
Table 4: Clearance suspensions

Date of suspension	Amount withheld	Reason for suspension	Release date of funds	PNA policy response
Aug-97	78 million USD (est.)	Increase in attacks on Israeli civilians	September-97	Short -term credit facility from the EU
Dec-00	500 million USD	Outbreak of the second intifada in September 2000	December-02	Special Cash Facility from the EU, loans from Arab donors through the Islamic Development Bank, and the Emergency Services Support Project (ESSP) financed by IDA and European donors and administered by the World Bank.
Mar-06	1,1 billion USD (est.)	Hamas victory in March 2006 followed by formation of Hamas government	July-07	Temporary International Mechanism (TIM) to channel donor money outside the PNA directly to payment of allowances for civil servants and non-wage expenditures for basic services.
May-11	100 million USD	Palestinian unity deal that brought together Hamas with its secular rival Fatah.	Around May 23	Overdraft from banks; salary payments delayed.
Nov-11	100 million USD	Palestinian granted full membership at UNESCO	November 30th 2011	Advance/overdraft from banks; salaries paid on time
Nov-12	100 million USD	Palestinian bid for UN observatory status	around January 20th 2013	Salary payments delayed (2012 first time accumulation of wage arrears) / Overdrafts from banks
Jan-15	450 million USD (est.) around NIS 1.8 Billion	In response to PNA's application to ICC	April 5th rejected transfer by PNA - Transferred later in full on April 20 2015	60 pct. salary payments, cash rationing, overdraft and loans from banks and donor support

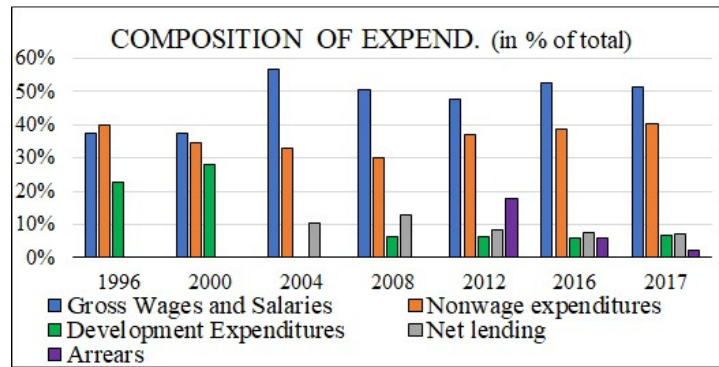
Source: PMA.

The reliance on clearance revenue, on the other hand, is unsustainable due to its volatility. As Palestine has no control over its borders, Israeli authorities collect all clearance revenues on Palestinian behalf. In addition to fiscal leakages, there were regular suspensions of transferring the revenues to Palestine in the past, which caused substantial damage to the Palestinian budget (cf. table 4). Lowering the reliance on clearance revenues for government financing would facilitate budgetary planning as well as ease the pressure that Israel can exert through these suspensions.⁴³ This, in turn, necessitates to broaden the tax base through enhancing productive activities, rather than increasing tax rates (as standard IMF austerity policies imply). In the current environment, the latter would lead to a sharp economic downturn, which could fuel social unrest.

Figure 16: Composition of Expenditures



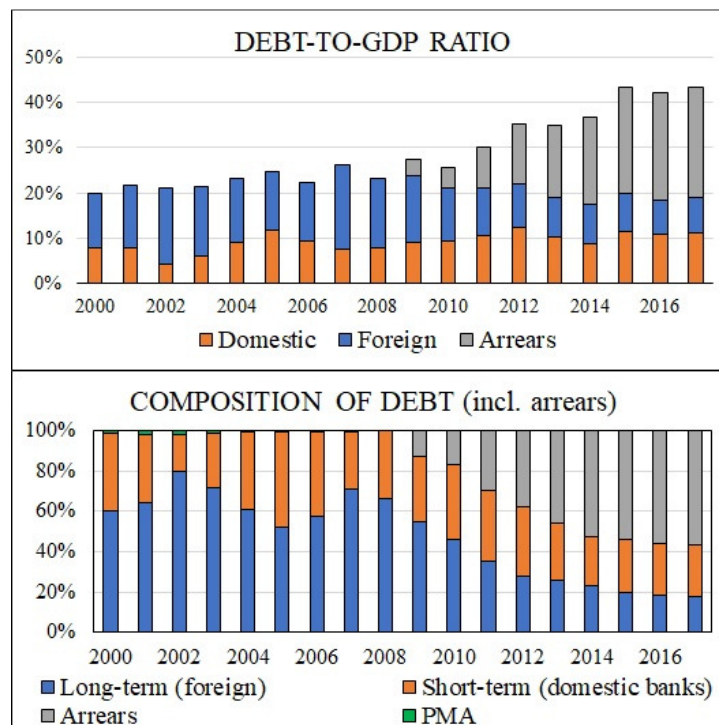
⁴³ Lowering reliance on clearance revenues, of course, does not mean that Palestine should be denied access to these funds, which legitimately belong to the PNA.



Source: PMA; Own Calculations.

On the expenditure side, the data strengthen the conclusions on the role of consumption-driven expenditures drawn in section 2, as gross wages and salaries and non-wage expenditures (which include primarily operational costs) account for most of public spending. Particularly worrisome is the demise of Palestinian development expenditures, as they ought to constitute a much more substantial share to revitalise the productive base and infrastructure. Moreover, figure 16 illustrates that after the decline in grants and donations from 2008 onwards, expenditures were greater than government revenues – a finding that is congruent with UNCTAD’s (2017a) assessment of the Palestinian budget. The actual size of the deficit was obfuscated through the accumulation of arrears, which allowed the budget to appear rather balanced, but drove the public sector further into debt (cf. section 4). In effect, the deference of payment commitments is a sign of nominal bankruptcy of the Palestinian public budget, as the trends in the data do not indicate that this might be a temporary liquidity crisis.

Figure 17: Palestinian Debt-to-GDP



Source: PMA; Own Calculations.

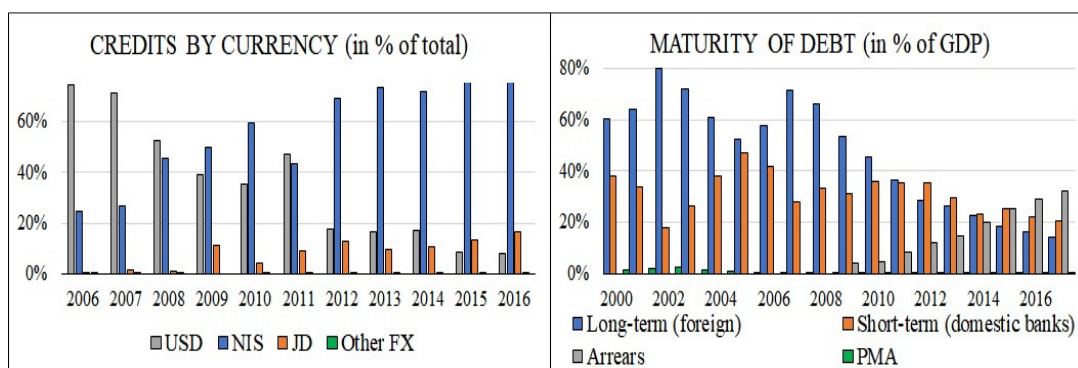
The development of public debt fits the analysis above. At first sight, its composition and size do not appear to be dramatic. Figure 17 shows that the ratio of domestic to foreign debt has increasingly shifted towards the former and is now quite balanced. Additionally, the official debt-to-GDP ratio of

18.5 per cent is much lower compared to neighbouring countries (incl. Israel, where debt-to-GDP (2017) stands at 60.8 per cent, according to BoI data), and well below the limit of 40 per cent set out in Palestinian law. However, these figures conceal the substantial downsides attached.

First, the low debt-to-GDP ratio ignores the fact that the accumulation of arrears has *de facto* increased public debt. If arrears are added to public debt, the ratio stands already above 40 per cent. Moreover, the pace of this accumulation appears alarming. Whilst in 2009, the volume of arrears was negligible, in 2017, it amounts to about 24 per cent of GDP and makes up most of the public debt (more than 50 per cent). It should be stressed that this study does not regard any particular threshold of debt-to-GDP ratios as problematic, but rather the lack of control over the currency in which public debt is denominated, coupled with its most recent trends and insights from previous sections.

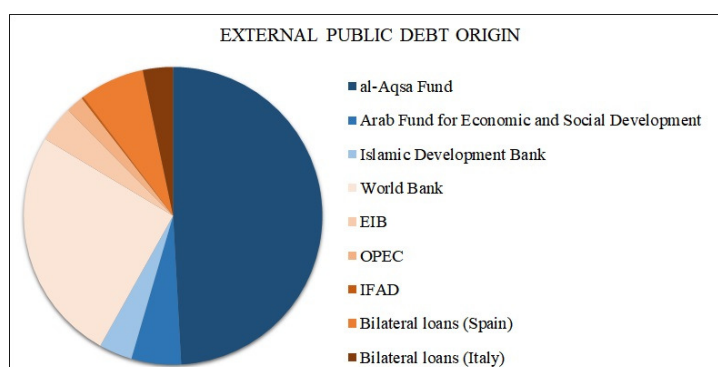
Compared to official debt-to-GDP figures, the problems entailed to the balanced ratio of foreign to domestic debt are less clear cut. On the one hand, a shift towards the latter implies lower exchange rate risks, as domestic debt is largely denominated in NIS and thus corresponds to future income and expenditures.⁴⁴ Figure 18 illustrates the extent to which borrowing in NIS replaced loans denominated in USD or the Jordanian Dinar (JD), whereby the aforementioned avoidance of risks associated with exchange rate fluctuations is explicitly stated as the rationale behind this change (PMA, 2016a). On the other hand, external debt, mostly originates from Arab financial institutions (cf. figure 19) and is almost entirely (92.5 per cent) long-term, according to PMA (2016a).⁴⁵

Figure 18: Credits by Currency and Debt Maturity



Source: PCBS, PMA; Own Calculations.

Figure 19: External Debt Composition 2016



Source: PMA; Own Calculations.

⁴⁴ As we show in section 6, the NIS increasingly takes on the role as the main circulating currency in the Palestinian economy.

⁴⁵ The remainder of external short-term debt represents public debt arrears.

The downside to a heightened reliance on domestic debt therefore is the shorter maturity, which is associated with these loans. Given the large pressures on the Palestinian budget, this may deter longer-term investments and create serious problems in the short-run, if deferred payment commitments were to mount. Since debt use is primarily directed towards financing current expenditures and consumption, as shown above, this implies that, while the shift to domestic debt may have limited exchange rate risks, it also appears to have sustained *status quo*. Moreover, the fact that annual interest paid on external debt amounted to NIS 7.6 million, compared to NIS 276.5 million on domestic debt (PMA, 2016a), shows that a larger share of long-term debt could substantially ease budgetary constraints. Instead of devoting more than 7 per cent of the Palestinian budget to interest payment, public spending could be directed towards long-term investments. One obvious solution, which has been discussed by Hamed (2000, 2017) amongst others, would be to issue long-term bonds denominated in NIS to combine the benefits of longer maturity and the avoidance of exchange rate risks. Yet, as discussed in more detail in section 6, in absence of a true lender of last resort (LOLR), this strategy entails further risks that the Palestinian authorities need to contemplate.

5.2. Promissory notes

For the sake of completeness, a final note is in order on promissory notes, given the increased attention this issue has received in the literature. In recent years, the accumulation of arrears has rightly been the subject to a range of concerns (i.e. IMF, 2017; 2018). To minimise the accumulation of arrears and avoid liquidity constraints, the Palestinian Ministry of Finance began to issue promissory notes. Public employees and suppliers can cash in or deposit these promissory notes with Palestinian banks (since 2016, however, a discount applies). The IMF (2017) regards this as outsourcing the problem of payment constraints to the banking sector, as the mechanism is akin to short-term bank lending. To reduce the exposure of the private sector to public debt and achieve a balanced budget, the IMF (2018) suggests to further cut public expenditures. These recommendations are problematic for several reasons. First, as outlined in more detail in section 6, the much more substantial increase of private compared to public loans does not indicate that there is a problem of excess borrowing in the public sector. Furthermore, the IMF does not provide any theoretical or empirical rationale for why public-sector loans should be more prone to default than private-sector ones. Quite the contrary, the strong focus on consumption rather suggests that more targeted public investment could foster productivity and growth. Second, the promissory notes appear *currently* as a rather minor issue, since they merely comprise a small amount of bank assets. Especially when comparing the problems associated with promissory notes to the much more fundamental issues identified in this report, their overall significance pales. Nonetheless, extrapolating trends into the future suggests an increasing demand for public funds, and the current institutional and economic environment does not leave much room for fiscal manoeuvre.

6. The monetary system

Due to the usage of three (foreign) currencies, the monetary system in Palestine presents a *sui generis* case for analysis. Hitherto, the excellent cooperation between the PMA, the PNA, and the banking sector was key to contain the repercussions of clearance revenue suspensions, declining foreign aid, and the GFC. However, increasing public debt and private consumption loans, as well as a depleting stock of foreign reserves, make it unlikely that these policies and monetary operations can be sustained indefinitely. If foreign banks become unwilling to fund the current account deficit, the banking sector and the PMA will run out of reserves at some point. Additionally, the Palestinian economy remains vulnerable to shocks emanating from further clearance suspensions and falling net transfers. In sum, therefore, the pressures exerted by current economic structures and institutional constraints cannot be sustainably concealed through *any* form of financial engineering but require rather fundamental changes within the productive sector and the regulatory environment.

6.1. Modern central banking

To set a comparative point of reference, the workings of a modern monetary system with a sovereign currency are presented first, before assessing the peculiarities of monetary operations in Palestine.

6.1.1. Money creation

The theory of modern central banking reaches back to the end of the nineteenth century and is based on the work of Thornton (1802), Bagehot (1898) and Wicksell (1936/1898). More recently, Moore (1988) and Goodhart (1999), amongst many others, have re-established insights from earlier writings as the theoretical standard. Yet, despite a *prima facie* theoretical consensus, the conduct of monetary policy has been heavily debated over the past 40 years in the academic literature as well as policymaking. More specifically, whilst advocates of the quantity theory of money still favour to steer the money supply, central banks have been using interest rates as the primary monetary policy instrument for a long time.⁴⁶

Although since the early 1990s, central banks worldwide pursue inflation targeting via interest rates setting, the myth of a money multiplier still dominates much scholarly work in economics. With the widespread adoption of unconventional monetary policy measures after the GFC, however, policymakers had to tame the rising fears of hyperinflation by debunking the standard textbook description of monetary policy as misleading. The Bank of England, for example,⁴⁷ notes that:

“(...) rather than banks lending out deposits that are placed with them, the act of lending creates deposits - the reverse of the sequence typically described in textbooks.” (McLeay et al., 2014, p. 15)

Thus, the ex-ante money multiplier is more accurately described as an ex-post divisor: The ratio of commercial bank to central bank money, which cannot be known in advance, can only be determined ex-post by dividing the money supply by the volume of reserves. As a corollary, there is neither a stable relationship between central bank reserves and the deposits of private banks, nor between money supply and inflation. This process furthermore implies that the amount of deposits is entirely determined by private banks, which merely extend their balance sheet when giving out a loan. In other words, private banks create money out of thin air.

⁴⁶ Bindseil (2014) illustrates that short-term interest rates have been used as the operational target from the mid-19th century on. Only after 1914, monetarists like Milton Friedman pushed through the so-called “Reserve Position Doctrine”, which re-established the quantity theory of money and dominated official monetary policy discussions until the 1960s. To this day, it is not clear if central banks have ever been able (or tried to) to control a broader monetary aggregate (except for some Asian countries that completely controlled credits by guiding the banking sector).

⁴⁷ Other official publications, such as Bundesbank (2017), have confirmed this process of money creation.

The process of money creation by private banks, which are not reliant on prior savings to provide credit, is undoubtedly the most important feature of modern financial systems. It entails that the money supply of funds follows the demand of the private sector, and not the opinions of a central bank board. Instead, the monetary authority can control the interbank rate (money market rate) by imposing a credit facility as a lender of last resort. This allows banks to borrow from other banks or financial institutions on the interbank market or from the central bank's facility, in case they run out of reserves. As the central bank's rate is higher than the interbank rate, banks who are unable to raise funds in the interbank market must pay a premium, which serves as a disciplinary tool.

The credit facility determines the ceiling for the interbank rate, as banks would not borrow at a rate higher than the one paid at the central bank. Some central banks, like the European Central Bank, additionally use a deposit facility, which gives private banks the opportunity to deposit excess reserves. The interest rate on such deposit facilities puts a floor on the interbank rate, as no bank would lend its reserves at a lower rate. By shifting this interest rate corridor, the monetary authority can influence the interbank rate. Moreover, excess or missing reserves can be absorbed or injected by standard open market operations, such as buying or selling bonds. As banks apply a mark-up on the interbank rate when determining lending rates, this procedure allows the monetary authority to influence the lending rate and thus the demand for credit.

6.1.2. Reserves and transfers

Private banks hold reserves in accounts at their central bank, which can be regarded as a deposit with the monetary authority to which they belong. If the deposits of a customer of one bank are transferred to that of another at a different bank, the balances of both banks need to be cleared correspondingly by a transfer of reserves from one reserve account to the other. Of course, there is no physical transfer, since the deposits and reserves are just numbers in the balances of private banks vis-à-vis their central bank.

Many economists still believe that the required reserve ratio (RRR) is a binding constraint for the creation of money, as banks will only create deposits in case they have enough reserves to cover the RRR. However, this inverts the actual process, as banks lend out money first and look for reserves later. If banks need reserves for the clearing process in the banking sector, they can borrow reserves from other banks or from their central bank (against collateral). Moreover, in most modern monetary systems, the RRR must be fulfilled only on average throughout a certain period (3 months, for example). The rationale behind this is that such regulations will smooth the interbank rate, as otherwise, sudden changes in the demand for reserves could lead to highly volatile interest rates. Yet, it should also be noted that many central banks stopped using the RRR at all, such as the Bank of England, the Reserve Bank of Australia, or the Bank of Canada (Fullwiler, 2006).

6.2. The financial system in Palestine

As Palestine does not have its own currency, the financial system operates very differently. Most importantly, as the central bank cannot act as a LOLR, the deposits that domestic banks create carry a greater risk for these banks to run out of liquidity. This in itself could restrain the creation of loans needed in a growing economy (World Bank 2008). The overview provided here first presents general structural features of the Palestinian financial system (6.2.1), before analysing the payment system (6.2.2), the role of the banking sector (6.2.3), and the limited opportunities of the PMA to conduct monetary policy (6.2.4).

6.2.1. Structural Composition of the Palestinian Financial System

In 2016, the Palestinian banking sector comprised 7 local banks with 187 branches and representative offices, and 8 foreign banks with 122 branches.⁴⁸ The foreign banks have reserve accounts at their

⁴⁸ Of the foreign banks operating in Palestine, 7 are Jordanian and one is Egyptian.

respective home central banks, which, contrary to the PMA, have the capacities to act as a LOLR. Nevertheless, the PMA requires a 9 per cent cash reserve ratio for domestic and foreign banks. As the PMA needs to borrow reserves from other central banks, or other domestic or foreign banks, Palestinian banks can only borrow foreign reserves to a limited extent. The Palestinian financial system additionally comprises several non-banking financial institutions: 276 money changers (52 individuals and 224 companies), 6 specialised lending institutions, which are licensed by the PMA, a small securities market (Palestinian Stock Exchange), some insurance companies and pension funds, as well as a tiny leasing and a mortgage sector.⁴⁹

As indicated above, Palestinian regulations stipulate that banks must hold required reserves at the PMA of 9 per cent. These reserves are deposited with the PMA and represent a source of funding for the monetary authority. These funds are primarily held in accounts at domestic and foreign banks. Hence, the amount of reserves held at domestic accounts determines the liquidity of the domestic banking sector. In order to fulfil a partial LOLR function, the PMA would need to hold a surplus of foreign reserves, which is difficult to achieve given the permanent current account deficits and concomitant capital outflows. As discussed in section 2.2, the capital and the financial account form the counterparts of the current account. If capital inflows do not suffice to cover the current account deficit, the economy's net foreign assets decrease. This can be the result of a direct decline in foreign assets, or an increase in foreign liabilities.

Moreover, the current account deficit could lead to a fall in reserve assets. As mentioned above, in 2016, Palestine lost USD 268.1 million reserve assets (compared to USD 99.7 million in 2015), and given the trends in revenue compositions and expenditures, this amount is likely to increase. Figure 20 provides further details on the development of the monetary base, net foreign assets in the banking sector, reserve assets of the PMA, and official currency reserves.

The monetary base comprises the total banking sector deposits (domestic and chartered) in addition to deposits of other financial institutions at PMA. With regards to assets held by the PMA (figure 20, upper left), there has been a higher share of claims on domestic banks relative to net foreign assets in recent years, which can be partially explained by the fall in reserve assets during that time (figure 20, upper right), including foreign currency reserves (figure 20, bottom right). This implies that the PMA prefers to use the monetary base to provide liquidity to the domestic banking sector, instead of accumulating foreign assets. The fall in net foreign transfers after 2008 appears to have necessitated such operations, as it was concomitant with a decline in net foreign assets in the banking sector (figure 20, bottom left).

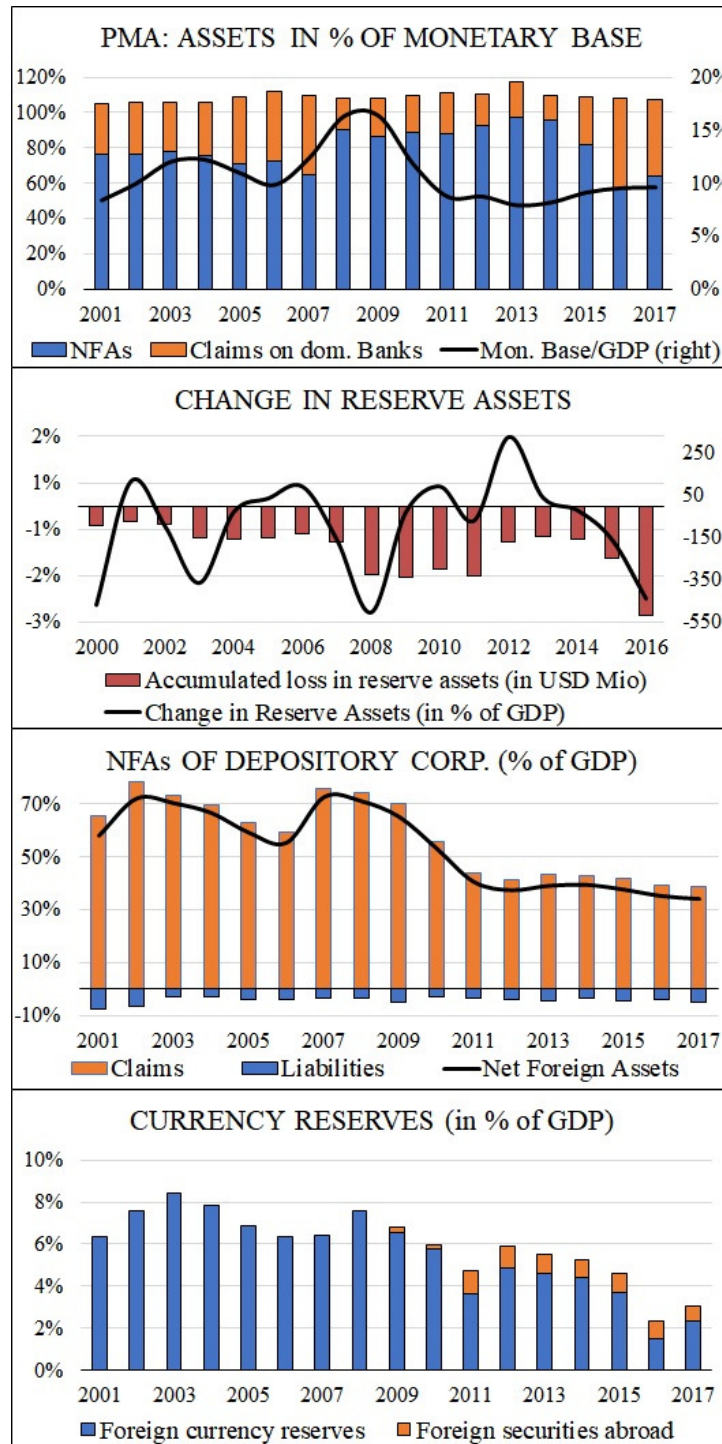
Whilst the PMA managed to alleviate the most urgent pressures in the banking system, it is questionable for how long these transfers can be sustained. As the current account deficit further deteriorates the stock of foreign assets, the banking sector might become short of liquidity. This could induce the PMA to place even more foreign reserves in the banking sector by holding them in current accounts at private banks. Although this would imply that the PMA temporarily takes on the role as a LOLR, it cannot extend its balance sheet (a critical feature of a *real* LOLR) due to its reliance on foreign reserves.⁵⁰ If the economy as a whole ran out of foreign assets, and financial institutions could not raise sufficient funds to compensate for the currency account deficit, banks would not be able to settle their transfers anymore, which may lead to a severe currency crisis.⁵¹

⁴⁹ We will discuss some of these non-banking financial institutions in the next section.

⁵⁰ Note that some scholars, such as Hanke and Schuler (2015), regard the absence of a LOLR as desirable, since a real central bank fundamentally distorts market-based incentives and induces moral hazard. However, given the historically disastrous political, economic, and social consequences of such institutional arrangements, this view is strongly rejected as ideological and narrow-minded.

⁵¹ In this regard, Hamed's (2000) suggestion to set up a credit line between the PMA and the BoI for as long as NIS is the official legal tender in Palestine is supported by the authors. Moreover, a credit facility of the PMA at the BoI should be established to facilitate long-term borrowing and secure access to NIS reserves. Given the problematic increase of consumption-oriented private credit, further discussed below, access to this facility could be restricted to long-term oriented public investments, as well as public emergency liquidity needs. The BoI would thereby not lend the reserves directly to the PMA, but indirectly via the PMA, which could monitor government expenditures. Similar arrangements could be sought with the Central Bank of Jordan. These measures would substantially enhance the PMA's abilities to meet the demand for reserves in the domestic banking sector (esp. in turbulent times), whilst smoothing public borrowing and reducing risks. Also, the participating central banks, in particular the BoI, would derive direct benefits from

Figure 20: PMA Assets and Official Currency Reserves in % of Monetary Base



Source: PCBS; PMA; Own Calculations.

these arrangements, as it would increase their seigniorage revenues without any significant risks attached. Due to the PMA's limited range of options to provide liquidity, foreign banks should rely on their own central banks as a lending facility, so that the PMA can lend exclusively to Palestinian banks. Additionally, Palestine's domestic banking sector has to be strongly regulated to avoid financial turmoil, which might increase the demand for loans from the PMA. Such regulations involve particularly restrictions for risky direct bank investments, for instance in equity and real estate

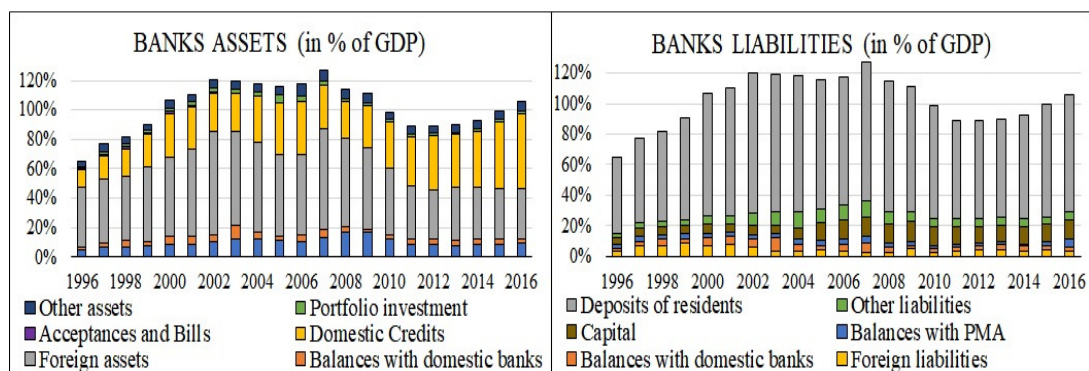
6.2.2. The domestic banking sector

As in most developing countries, the Palestinian banking sector dominates the financial sector. Given the institutional arrangements, Palestinian banks cannot solely rely on central bank credit, but must pursue other sources of funds to accumulate reserves. Even though banks create deposits when giving out loans, they need reserves in case a customer wants to withdraw cash and/or transfer their deposits to a different bank account, and to fulfil the RRR. Particularly in a cash-based economy, access to reserves for these functions is even more important.

Banks in Palestine initially were required to maintain a minimum credit-to-deposit ratio of 30 per cent, which was raised to 40 per cent in June 1998. In 2007, the PMA eliminated the minimum ratio completely. Currently, there is no minimum or maximum credit ratio at all. In addition, the required ceiling on the foreign assets-to-deposits ratio of 90 per cent has been lowered to 65 per cent in 1998, and to 55 per cent in 2009. According to Hamed (2017), in 2016, this ratio was only 30.5 per cent, which reflects the overall decline of foreign reserves in Palestine. The present section shows, more specifically, that banks strongly expanded private consumption credits after 2009, and even more so after 2013, while at the same time, reducing the share of assets invested in accounts at foreign banks.

Figure 21 shows that deposits constitute the primary source of funds for the Palestinian banking sector, whereas balances with the PMA, foreign liabilities, and other liabilities play a minor role. Banking capital, on the other hand, has increased during recent years, which improved the overall buffer for writing off non-performing loans (NPL).⁵²

Figure 21: Assets and Liabilities of the domestic banking sector



Source: PMA; Own Calculations.

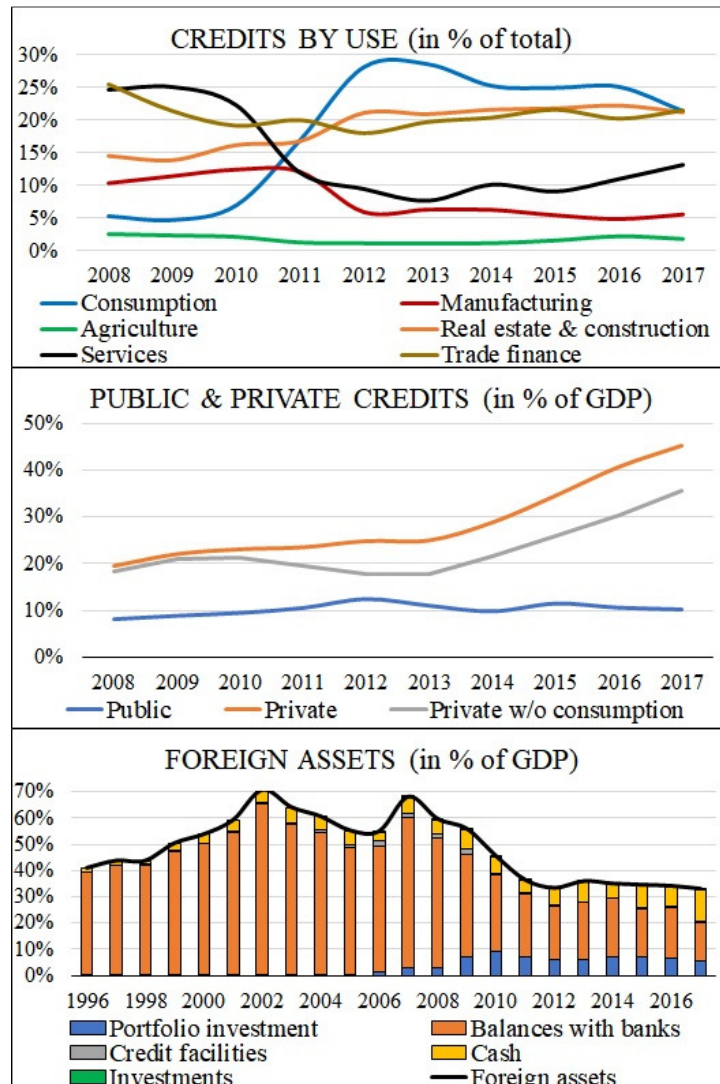
The declining share of net foreign assets identified above was concomitant with a higher share of domestic credit. Given the diminishing net foreign transfers, falling real wages, and suspensions of payments, this finding is not surprising. Moreover, most of the domestic credit was driven by private consumption credits as well as real estate and construction (cf. figure 25). Whilst this confirms previous findings, it indicates that (i) these loans might become a severe problem for the banking sector, if households were to default on their debt due to low wages, unemployment, or higher interest rates, and (ii) the demand on reserves might increase, as consumption credits are often used for cash payments. However, as cash holdings have relatively increased, the banking sector seems to be well-prepared for higher withdrawals. On the liability side, 65 per cent of foreign liabilities are deposits of non-residents, while the rest are deposits of foreign banks.

If a country does not have its own currency, several specific implications apply to the domestic banking sector. First, in times of liquidity constraints, there is a possible rationing of credits. Whilst under normal circumstances (i.e. sovereign currency), banks could borrow an unlimited amount of reserves from their central bank, Palestinian banks risk a shortage of reserves on the interbank market

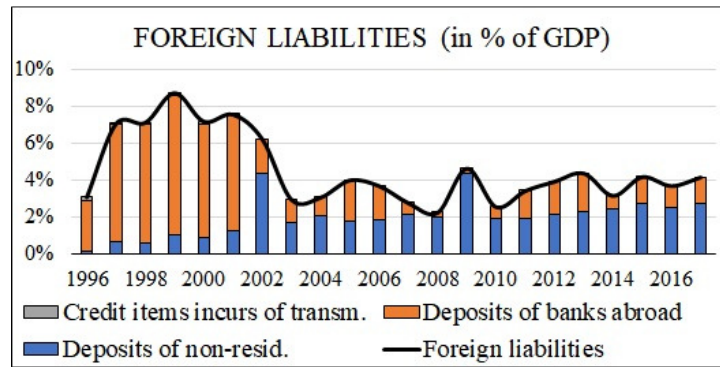
⁵² This is a consequence of the PMAs efforts to implement capital adequacy requirements in line with BASEL II accords.

if too many deposits are created. This could lead to the classical constellation as in the loanable funds framework, in which public sector borrowing crowds out investments from the private sector, as reserves diminish and prices for loans increase. Although this is a theoretical possibility, there is little evidence for this in Palestine (cf. figure 22). Moreover, even if it were the case, and the government borrowed to finance long-term productive investments, crowding out of private sector credit, which is largely driven towards consumption, would have rather beneficial side effects.⁵³

Figure 22: Credits, foreign assets and liabilities of the Palestinian banking sector



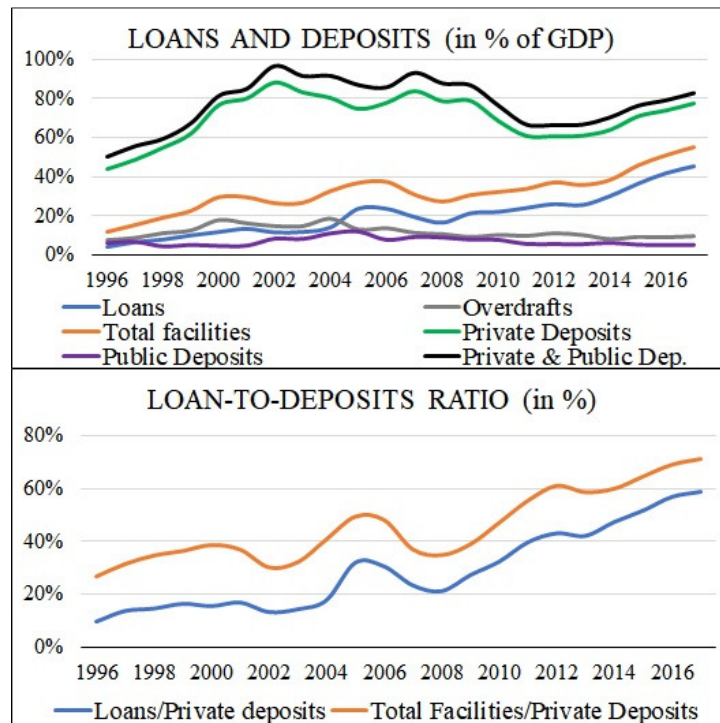
⁵³ Figure 22 shows that while public sector credit (relative to GDP) falls from 2012 onwards, private sector credit and total credit strongly expands. Moreover, if the public sector uses credits to finance investment, the reserves move back into the banking sector. Hence, we believe that the public sector does not need to be reluctant at this moment, as long as productivity enhancing investment expenditures need to be financed.



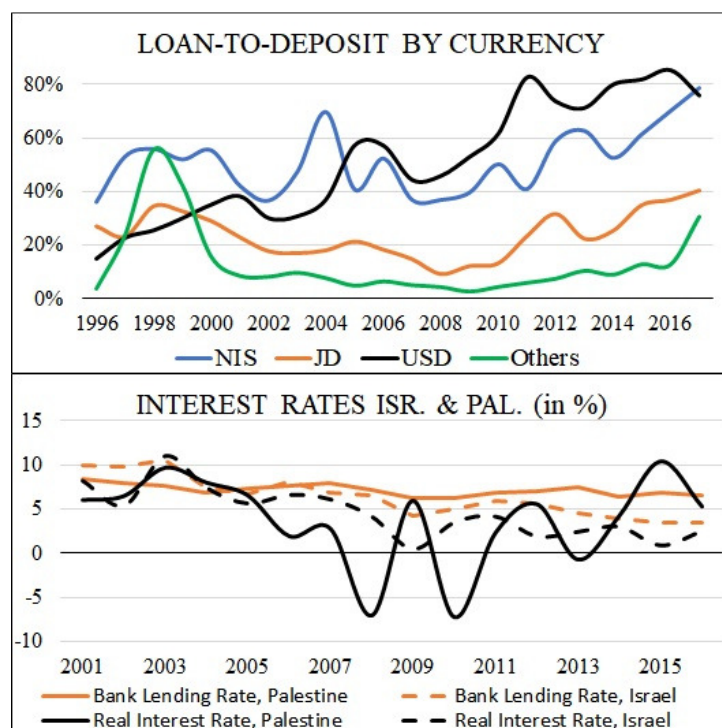
Source: PMA; Own Calculations.

The loan-to-deposit ratio has strongly increased after 2008, as deposits fell by more than 20 percentage points relative to GDP and recovered rather slowly after 2013 (cf. figure 23). Loans, on the other hand, increased by more than 20 percentage points, so that the ratio of loans to deposits currently stands at a historical high of 71 per cent. The qualitative composition of these loans, namely the large share of consumption credits, could lead to a higher amount of NPLs and write-offs, given the difficult economic environment and grim outlook.⁵⁴ Figure 23 furthermore illustrates that the overall higher loan-to-deposit ratio is primarily driven by loans denominated in NIS and USD, which necessitates a closer cooperation with the BoI and the Federal Reserve. Nevertheless, compared to other developing countries, where loan-to-deposit ratios often exceed 100 per cent, the situation in Palestine is relative stable (Hamed 2017).

Figure 23: Loans, Deposits and interest rates



⁵⁴ It should be noted, however, that as of now, NPL pose a miniscule threat to the banking system, as the current ratio stands at a very low 2.3 per cent.



Source: PMA; BoI; Own Calculations.

When analysing the interest rate environment, a further potential reason is apparent as to why long-term productive investments have declined. As figure 23 (bottom, right) shows, (pseudo-) real interest rates in Palestine have been highly volatile.⁵⁵ Whilst nominal interest rates of Palestine and Israel are quite similar, which is not unexpected given the prominent role of the NIS in Palestine, the Palestinian inflation rates make the real rate unpredictable. Businesses and entrepreneurs, however, need a stable and low real interest rate environment for planning long-term investments and estimate future returns.⁵⁶ Since it is difficult to get access to long-term credit in Palestine, entrepreneurs must frequently renew their loans, which makes the issue even more important.⁵⁷

Table 5 shows two standard liquidity indicators, namely the ratio of liquid assets to total assets and the ratio of liquid assets to short-term liabilities. Both exhibit a clear downward trend since 2009, yet notwithstanding this development, the financial sector in Palestine looks quite sound. Compared to other MENA countries, the liquidity indicators are in much better shape, and non-performing loans are below 3 per cent in 2017. Also, capital ratios have increased and remain high compared to international standards. These conclusions are broadly in line with IMF (2017, 2018), which speaks in favour of the high-quality work of the monetary authorities in Palestine. On a cautionary note, however, the trend of the loan-to-deposit ratio and the liquidity indicators should be monitored carefully.

⁵⁵ Since there is no data for inflation expectations available, actual inflation instead of inflation expectations is used to derive real rates.
⁵⁶ It should be noted that the volatility of inflation dynamics and therefore the real interest rates are also caused by a highly instable political environment.
⁵⁷ An additional problem faced by small and medium enterprises (SMEs), is the lack of sufficient and suitable collateral and the high amounts of collateral needed for receiving a loan. Political instability, high unemployment rates, and volatile income developments force banks to prevent financing investments. Programmes like the European Palestinian Credit Guarantee Fund (EPCGF) in cooperation with the German Kreditanstalt für Wiederaufbau (KfW) and the loan guarantee facility of the Palestine Investment Fund (PIF), US Overseas Private Investment Corporation (OPIC), local banks, and the Middle East Investment Initiative (MEII) help SMEs overcoming their credit constraints.

Table 5: Liquidity Indicators

	2009	2010	2011	2012	2013	2014	2015	2016
Liquid assets to total assets	43.3	40.3	38.2	36.4	38.3	35.5	35	33.8
Liquid assets to short-term liabilities	55.1	51.7	49.2	49.6	52.4	48.3	45.6	44.5

Source: PMA (2015, 2016b, 2017).

6.2.3. The payment system

Despite recent improvements of electronic payment instruments, Palestine remains a paper-based economy, in which cash is the most frequently used form of money for quotidian transactions (PMA 2013). There are several reasons for the reliance on cash, including the lack of access to banking services for a large part of the population, the use of multiple currencies, long distances to Automatic-Teller Machines (ATMs) and Points of Sale (POS), high costs of using electronic payments, path dependencies, and the social culture more broadly (ibid.). Yet, on the other hand, the constrained supply of liquidity in Palestine (when exclusively drawing on foreign reserves) makes this pattern rather problematic.

In the past, the PMA has significantly enhanced the efficiency of bank transfers by introducing a Real-Time-Gross-Settlement (RTGS) system called BURAQ in 2010. BURAQ is primarily used for transfers between banks, which account for 73 per cent of the total value of transfers. However, with regards to non-cash payment instruments, checks are still most frequently used to settle transactions (PMA 2016a).⁵⁸ In 2012, the PMA introduced the national switch system to handle the settlement of credit card payments, whilst three years later, in 2015, the electronic national switch 194 merged all electronic payments under one ATM consortium and lowered charges for using electronic payment systems.

The PMA is encouraged to further improve the electronic payment systems to smooth payment flows and minimise the risks of liquidity constraints. Currently, private banks use checks to settle cross-border transfers via a *correspondent* bank. In practice this means that Palestinian payments to Israeli account holders involve writing a check against the payer's account, which is deposited *physically* at the account of the Israeli bank. As both banks do not hold accounts at the other institution, a correspondent Israeli bank verifies the payer's solvency and transfers the fund via debiting the payers account at the Palestinian bank and crediting the Israeli's bank account at the correspondent bank. Hereafter, the Israeli bank can credit the recipient's account at the Israeli bank. However, as Israeli banks have indicated to be more reluctant to offer correspondent services in the future, this might have adverse consequences. First, it could lead to an increase in cash transactions and undermine the PMA's efforts to promote electronic cash payments and financial inclusion. Second, it may also increase the risk of money laundering, tax evasion as well as a disruption of trade (IMF 2016).

The most recent developments on these fronts are welcome. First and foremost, the Palestinian Cabinet has adopted a plan, which was developed by the World Bank and the Swedish Central Bank, to promote electronic payment instruments over the next five years. Moreover, with regards to the relationship between the BoI and the PMA, negotiations to reregulate and rearrange the relationship between the two sides are scheduled to begin in mid-2019. Meanwhile, Israel has announced the creation of a new mechanism to facilitate bank transactions between Palestinian and Israeli banks (Portland Trust Bulletin, November 2018). An Israeli state-owned body will be established in order to serve as a substitute for Israel Discount Bank and Bank Hapoalim for dealing with Palestinian banks. The two Israeli banks currently carry the GoI's responsibility under the Paris Protocol to supply banks operating in Palestine with banking services such as credit-card processing, clearing checks and transfers of shekel banknotes.

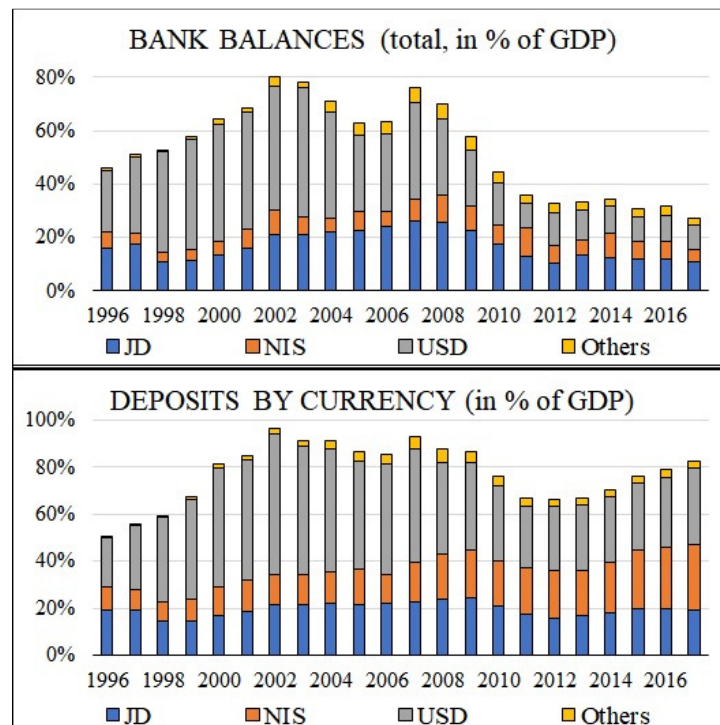
⁵⁸ The clearing of checks is managed by the PMA by running two clearing houses in Ramallah and Gaza, where banks can submit checks in all currencies. Clearing houses conduct one session for each currency and merge bank files by a multilateral net settlement before sending them to the PMA via email. The clearing results are then transferred to BURAQ manually. Obviously, this procedure is very time-consuming and prone to errors and should be replaced by an electronic clearing system.

6.2.4. The interbank market and currencies in circulation

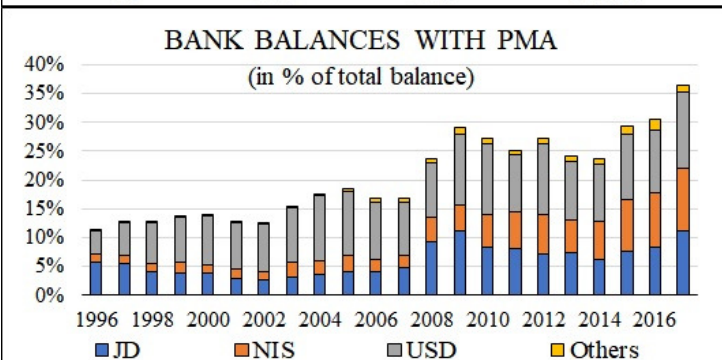
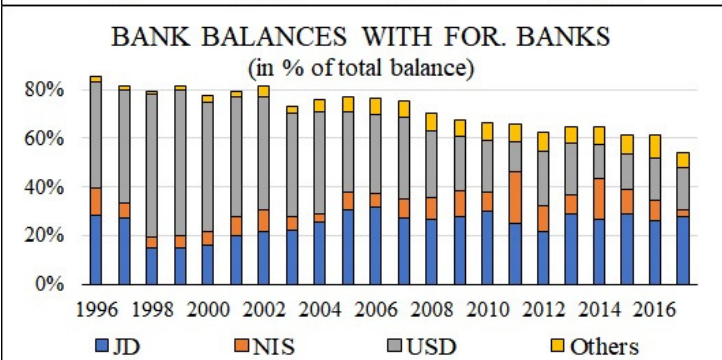
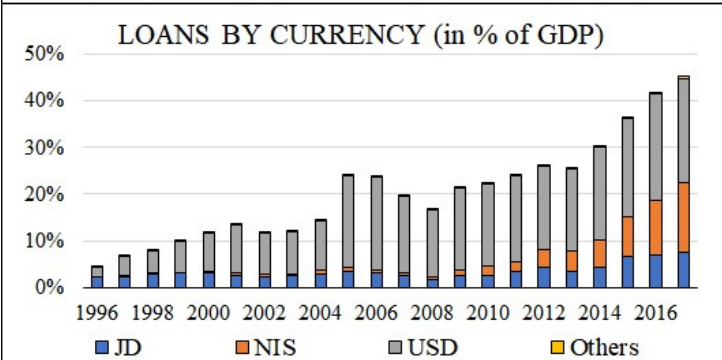
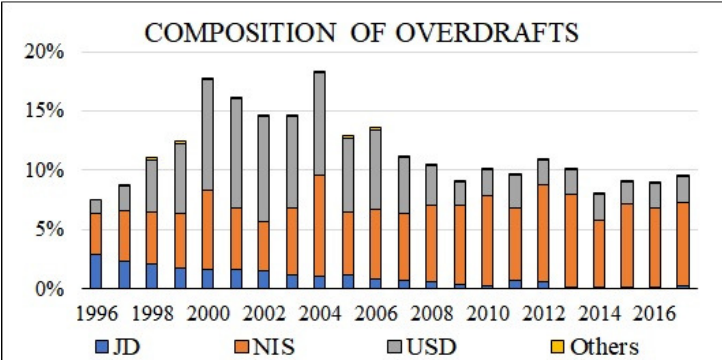
Figure 24 provides an overview of the *sui generis* nature of the Palestinian banking sector and its qualitative changes over time. Thereby, several features deserve particular attention. First, it should be noted that all three currencies – the Jordanian Dinar, the New Israeli Shekel and the US Dollar – are in use for different purposes. Regarding loans, the USD clearly dominates the credit market by making up roughly half of total loans. Loans denominated in NIS, one the other hand, account for one third, and JD loans for one sixth of the total. In terms of bank deposits, the distribution is more balanced. Here, the JD accounts for 23.4 per cent, the USD for 39.5 per cent, and the NIS for 33.7 per cent of total deposits.

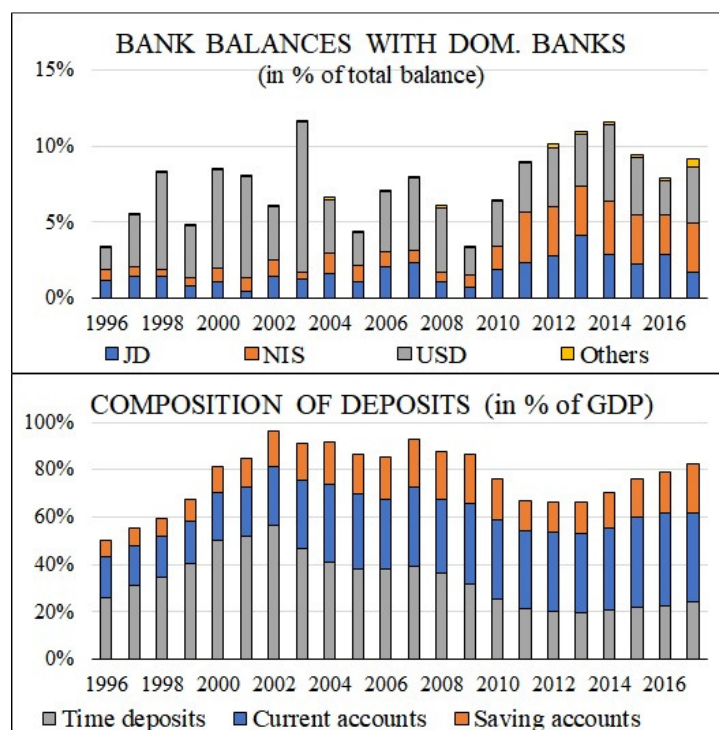
Notwithstanding the dominance of the USD for loans, the data show that the importance of the NIS has markedly increased over the past years. As the ratio of USD loans to GDP grew only moderately (from 17.6 in 2009 to 22.2 per cent in 2017), figure 24 shows that the surge in the aggregate loans-to-GDP ratio was primarily driven by NIS denominated loans, which increased from merely 1.2 per cent of GDP in 2009 to close to 15 per cent in 2017.⁵⁹ In line with the findings in section 6.2.1, the graphs show a fall in bank balances with foreign banks and an increase in balances with the PMA, compensating for the fall in foreign reserves.

Figure 24: Currencies in use in the Palestinian banking sector



⁵⁹ The heightened importance also applies for the usage of checks, which are, to a large extent, denominated in NIS (roughly 75 % of all presented checks between 2012 and 2016 were denominated in NIS (PMA 2016a)).





Source: PMA; Own Calculations.

The interbank market in Palestine is small, since foreign chartered banks have access to their home central banks facility. Bank balances with domestic banks have increased but stay at a low level of 9 per cent in 2017. In addition, the share of time deposits has decreased vis-à-vis current account and savings accounts, from more than 40 per cent of deposits in 2008 to less than 30 per cent in 2017. Hence, this indicates that banks depend on very short-term funding and therefore risk that money from current accounts and savings deposits could be instantly withdrawn, which would deteriorate the liquidity position. As Hamed (2017) furthermore observes, the sharp decline of liquidity in the banking system since 2007 severely affects the capacities to absorb future clearance revenue suspensions or other fiscal shocks.

To manage liquidity in the banking sector, the banking law of 2010 allows the PMA to issue debt instruments, such as certificates of deposit (CDs). This could serve as a vehicle for absorbing short-term excess liquidity and offset some of the malfunctioning of the interbank market. By buying and selling these instruments, it could smooth interest rates in the domestic interbank market by providing intraday liquidity. CDs could have a maturity of 3 months or up to 5 years, so that the banking sector would have additional access to longer-term sources of funds. Also, short-term certificates could absorb excess liquidity of some local banks due to monthly limits on NIS cash transfers to the BoI (IMF 2017).⁶⁰ As the BoI, upon request of the PMA, has recently accepted higher transfers, PMA-issued CDs could serve as a compromise to solve short-term liquidity problems. Moreover, CDs could support the development of the interbank market by providing a better investment opportunity than the current accounts at the PMA (Gray et al., 2013). However, this does *not* solve the major problem of a missing LOLR. Moreover, it should be mentioned, that the PMA could incur losses, if opted to such a measure.

⁶⁰ These limits are justified as measures against money laundering.

6.2.5. The Palestine Monetary Authority

Current institutional arrangements make it impossible for the PMA to conduct independent monetary policy,⁶¹ as interbank rates of the currencies in circulation are set by foreign monetary authorities.⁶² Due to these circumstances, the PMA adopted a floating interest rate policy, letting the domestic interbank market determine the interest rates on the different currencies in use. Article 57 of the *Law No. 2 of 1997 on the Palestine Monetary Authority* allows the PMA only to provide loans up to 120 days (against collateral). Credit extensions are only granted if a bank submits a financial reform programme to the PMA. Thus, the range of options to directly affect economic development through monetary policy is restricted to tools such as guaranteeing loans and offering special development facilities to help SMEs to get access to credit.

Given its limited scope for monetary policy, the role of the PMA in the Palestinian economy is primarily related to supervisory and advisory functions. In this regard, however, the PMA has attained some notable achievements. Since its foundation in 1994, it has developed a clearing house and the aforementioned RTGS system, whilst continuously providing banks with credit information and training of banking staff members. Moreover, the PMA periodically publishes reports on financial stability, advises the PNA on financial issues, and steadily improves the infrastructure to smooth cashless payment transfers. Finally, the PMA also helps domestic banks in transferring excess NIS liquidity and damaged banknotes to Israel, as described above.

Table 6: Balance Sheet of the PMA in 2017

PMA 2017 (in USD Million)			
Domestic Assets	592.30	Balances of Banks and Institutions	1398.60
Balances with Palestinian Banks	592.30	Required Reserves	1127.20
Current Account	3.70	Other accounts	271.40
Time Deposits	530.00	Provisions⁶³	28.30
Domestic Investment	58.60	Provisions for depreciation	0.00
Foreign Assets	894.50	Other Provisions	28.30
Balances with Banks abroad	694.70	Other liabilities	9.30
Current Account & Demand Deposits	18.20	Capital & reserves	121.00
Time deposit	676.50	Paid up capital	90.30
Foreign investments	199.80	Reserves	30.70
Fixed assets	43.70		
Other assets	23.70		
Government loans and advances	3.00		
Sum	1557.20	Sum	1557.20

Source: PMA; Own calculations.

To provide a more coherent understanding of the PMA's operations in the Palestinian financial system, table 5 shows its balance sheet as of 2018. Most importantly, banks are obliged to hold the required amount of reserves relative to their customer deposits at the PMA. These reserves, on the

⁶¹ Although the Paris Protocol assigned a function of the LOLR for the domestic banking sector to the PMA, it cannot fulfill this function as it is financially constrained (as a result of persistent currency outflows) and unable to create reserves. Increasing the money supply in the medium run can only work through foreign reserves, so that the BoI should serve as a LOLR or the PMA would need a credit line with the BoI.

⁶² Offering lower interest rates on lending facilities of the PMA would therefore merely result in arbitrage, as banks would be able to borrow foreign reserves from the PMA and lend to the banks of the country where these reserves originate. Banks would take advantage of the interest rate differentials to cash in riskless profits until the PMA runs out of reserves. In addition to the losses incurred to the PMA, such operations would have no effect on the Palestinian interbank market, as the interest rates for NIS, for example, are set by the BoI. If interest rates fall below the desired level, the BoI will simply absorb excess liquidity to push the interbank rate back to its respective target. For the whole economy, this means that monetary conditions in Palestine depend on monetary policy of the Fed, the BoI, and the Central Bank of Jordan, which is, most often, unsuitable for Palestine.

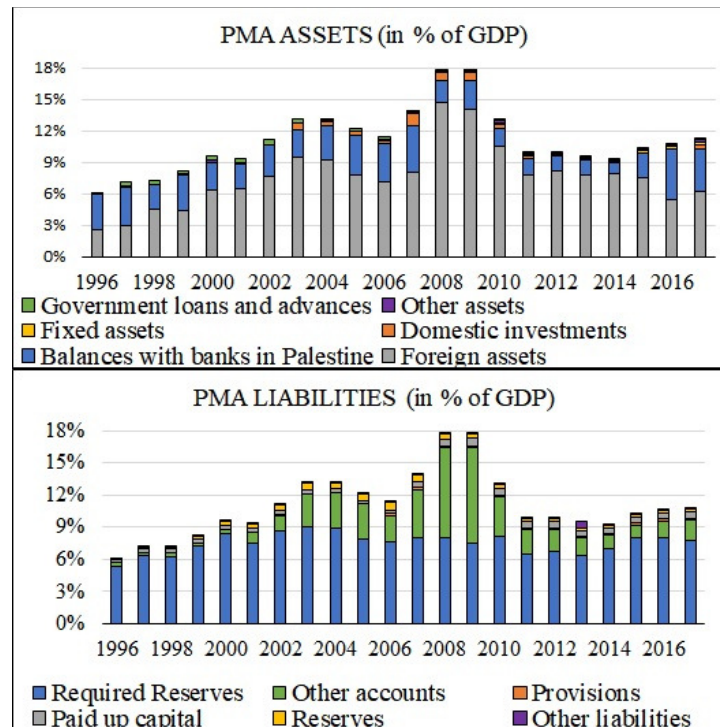
⁶³ Provisions comprise a stock of precautionary reserves and are a liability of uncertain timing.

other hand, constitute the main source of funds for the PMA. Additionally, banks might hold further deposits in other accounts at the PMA.

The asset side comprises the PMA's accounts at domestic and foreign banks, fixed assets (incl. land), other assets, and government loans. The deposits at domestic and foreign banks represent claims against these entities and can therefore be interpreted as 'loans' to respective banks. These constellations allow the PMA to influence the amount of reserves in the banking sector, as it can decide whether to hold its funds in domestic or foreign bank accounts.⁶⁴ In case of a sudden liquidity shortage, the PMA could transfer deposits from accounts at foreign banks to the domestic banking sector, as long as it does not run out of foreign assets. Furthermore, the PMA can hold time deposits to support the domestic banking sector overcoming problems of maturity matching. Yet, given the current institutional arrangements and the absence of government securities, issuing CDs as described in the previous section might be step forward, but such operations are limited through the PMA's dependence on foreign assets.

Analysing the development of assets and liabilities of the PMA, a decline in foreign assets and an increasing importance of balances with the domestic banking sector is notable (cf. figure 25). This suggests that the PMA operates as a partial LOLR for domestic banks, as diminishing foreign transfers led to a decline in foreign assets. Regarding the composition of the balance sheet, in 2016, foreign assets reached their lowest value since 1997 of 51 per cent of total assets, followed by a weak recovery in 2017 (to 57 per cent). Finally, the increase of private consumption loans leads to higher liabilities of the domestic banking sector with the PMA, as the banks are in the need of foreign reserves.

Figure 25: Assets and Liabilities of the PMA



Source: PMA; Own calculations.

⁶⁴ Consider, for example, a case in which a domestic bank must increase its required reserve holdings, as customer deposits have increased. In such a case, the PMA can choose to hold these reserves in an account of a domestic bank, so that these reserves get back into the domestic banking sector, or it can decide to hold the reserves in a foreign account.

With regards to liabilities, the data confirm that required reserves holdings of domestic banks constitute the main source of funds for the PMA. Moreover, the graph shows that banks tend to hold excess reserves at the PMA at other accounts in good times (as the peak of the green bar in 2008 and 2009 indicates). When net transfers are high, and the current account deficit turns into a surplus, there is an inflow of foreign reserves, which increases excess reserve holdings at the PMA. In terms of total liabilities, these excess reserves declined to a value of merely 14 per cent of GDP in 2016. Yet, even when reserves are scarce, the domestic banking sector still holds excess reserves at the PMA. This seems to be an indication of the aforementioned malfunctioning of the interbank market, as otherwise, these reserves could be lent out to other banks that are short of liquidity (instead of holding excess reserves for precautionary reasons).

Although the difficult economic conditions necessarily increase the vulnerability of the PMA (and the financial system as a whole), and gradually tighten its capacities to serve as a LOLR, the overall condition of the PMA is solid. Given the very low share of government loans (less than 0.2 per cent of total assets) and the increasing fiscal pressures on the Palestinian budget (cf. section 4 and 5), the PMA could extend its credit provision to the PNA,⁶⁵ if the use of these credits were directed towards revitalising the productive base. Due to the concomitant positive effects on economic activities, this might lead in the long-run to a higher share of foreign assets in the PMA's balance sheet.

⁶⁵ It should be noted that the PMA is currently prohibited by law from doing that. As abolishing any limits to government indebtedness, this operation would therefore require a change in regulation.

7. Financing government activity: lessons for Palestine

Based on the insights of the preceding extensive analysis, this chapter draws on a wide range of theoretical and empirical research to assess the suitability of different modes of financing government activity in Palestine. It starts by presenting general advantages and disadvantages ascribed to a convertible currency (7.1), before moving on to analysing different modes of financing the issuance of government bonds (7.2), the role of government securities for debt markets (7.3), the problems associated with capital market-based financing (7.4), and, finally, the impediments for introducing a Palestinian currency (7.5).

The study concludes by stressing that stable government financing is fundamentally contingent on the ability of a nation's central bank to intervene in bond markets. This, in turn, necessitates differentiating between bond market financing in a domestic and a foreign currency. As the absence of a Palestinian currency severely restricts the options for the PMA to stabilise bond prices, it is recommended that the issuance of government bonds should be possible only *after* the introduction of a Palestinian currency. Both of these conditions, however, require a *prior* stabilisation of the external sector and a fundamental reform of the current institutional governance framework. If the PNA were to issue bonds in a foreign currency, long-term interest rates are likely to be very volatile, making government finance a ride on a roller coaster.

7.1. General advantages and disadvantages of a convertible currency

Since the collapse of the Bretton Woods system in 1971, most major currencies in the world are floating against each other. Although the departure from a fixed but adjustable to a floating exchange rate regime was intended to be of mere temporary nature, it has been the status quo for almost 50 years. Whilst the merits of a fixed vis-à-vis a floating exchange rate regime were subject to much academic and policymaking debates, often with inconclusive and conflicting propositions, it is undeniable that the world has seen numerous major currency crises in both developed and developing countries under the post-Bretton Woods regime.

The Mundell-Fleming trilemma⁶⁶ presents the most popular framework to evaluate exchange-rate options for policy-makers. Currently, the dominating intellectual paradigm regards an open capital account as indispensable, as the value of the currency could either be determined by supply and demand on foreign exchange (FX) markets or would at least tie the hands of policymakers in using monetary policy to support economic activity. Yet, notwithstanding the beneficial attributes ascribed to floating exchange rates, some of the most adherent supporters of free markets argued against such regimes based on frequently observed irrationalities of FX markets. Hayek (1937), in particular, recognised the destructive potential of short-term capital movements and the inherent structural imperfections in financial markets, which are usually dominated by a small number of agents.

In Flassbeck (2001), one of the authors further elaborated the problems associated with the trilemma, if policymakers chose to adhere to open capital accounts. Whilst under normal circumstances, floating exchange rates should merely offset inflation rate differentials (which would entail less economic hardship than an internal devaluation), in practice, an open capital account creates an “impossible duality” – in that it is incompatible with sovereign monetary policy. The reason for this is, succinctly, that in cases of high inflation rates, international speculators take advantage of concomitantly rising interest rates, which in turn leads to an appreciation of the value of the currency (whereas, in fact, the opposite is needed). High interest rates and an appreciating currency then aggravate the conditions for economic development.

⁶⁶ The trilemma states that countries cannot pursue fixed exchange rates, open capital accounts, and sovereign monetary policy all at the same time, but must choose two out of the three.

On the other hand, fixing exchange rates permanently through currency boards or dollarization (or, as in the case of Palestine, an increasing “Shekelization”) may provide better monetary stability, yet also destroy domestic productive capacities and jobs. Moreover, such institutional arrangements deprive a country of employing monetary policy to support economic growth, which is a major shortcoming especially for developing countries. In addition, if a country were to engage in trading relationships with its neighbours, a dollarized (or shekelized) economy has to find a way to retain its competitive position in the markets for goods and services. Without a national currency, internal devaluation is the only policy option, which generally depresses economic growth and imposes severe economic hardship on the population.⁶⁷ The easier and more elegant way is to devalue the national currency, or at least alleviate some of the upward pressures on the exchange rate. The ability to maintain a competitive exchange rate, whilst, at the same time, engaging in international trade, is even more important for rapidly growing developing countries (Rodrik, 2005), which often have higher inflation rates than advanced economies. Furthermore, the capacities of the private banking sector to support growth through credit denominated in a national currency (to not rely on foreign reserves), is equally crucial. Taken together, above points indicate that the question of the right currency regime is not as straightforward as it may initially appear.⁶⁸

Given Palestine’s large trade deficit, several reports, such as, for example, UNCTAD (2009), seem to suggest that an uncompetitive exchange rate is a critical part of the problem. As a corollary, introducing a Palestinian currency would serve as a way to rectify some of the structural imbalances. Although section 2 showed that there is little evidence for Palestinian exports to react to changes in relative prices, or any signs of a substitution-effect,⁶⁹ this issue deserves further attention, as a devaluation is certainly a key strategic tool to enhance or restore a country’s competitiveness. More specifically, the main mechanism through which devaluations are supposed to operate relates to positive demand effects from abroad. If unit labour costs, defined as labour costs per unit of output, remain unaffected in the national currency, unit labour costs measured in international currency will decrease. As a consequence, exports become cheaper and demand will surge (Senner and Sornette, 2017). For an economy in which resources lie idle, the additional competitiveness gained through a devaluation can raise national output with very short time-lags. Moreover, by referring to cumulative causation theory, some scholars, such as Cruz (2015), argue that positive effects will not remain confined to the tradable sector. At some stage of economic development, the boost in tradable goods sectors will spill-over to manufacturing, which is critical for economic growth as it facilitates production with increasing returns to scale (Kaldor, 1966). The expansion of manufacturing then lays the foundation for productivity growth, increasing real wages, and higher living standards. Further beneficial effects of these developments relate to a continuous upgrading of production and higher productivity, which, in turn, increases the non-price characteristics of exports and overall price stability. Thus, in sum, there is broad consensus in the literature about the importance of a competitive exchange rate for economic development.

Yet, following Krugman and Taylor (1978), amongst many others, there is also a substantial amount of evidence for contractionary effects of devaluations. If it were concomitant with a redistribution against wage earners, who have a higher marginal propensity to consume, total output in the economy might fall. Moreover, further risks include imported inflation, a specialisation in low-value added and homogeneous products, as well as a balance of payments crisis, especially if a large part of debt is unhedged and denominated in a foreign currency (see McCombie and Roberts (2002), Razmi (2005), and Cruz (2015) for further discussion). Yet, it should be noted that the adverse effects of devaluations outlined in the literature mostly refer to one-time effects of very significant devaluations, rather than dangers associated with real exchange rate management as such. In any case, however, as stressed throughout this paper, an extensive analysis of the economic fundamentals and the

⁶⁷ This, however, is the main argument of proponents of such institutional arrangements, as it incentivizes fiscal discipline and wage restraint, which, based on neoclassical theory, foster economic growth.

⁶⁸ It should be noted at this point that, for reasons of credibility, most studies on this subject recommend a currency board with very limited monetary policy discretion as the optimal institutional arrangement for a transitional period (cf. Cobham, 2004; Beidas and Kandil, 2005; UNCTAD, 2009).

⁶⁹ As opposed to simulating a currency devaluation and estimate the effects on main economic indicators (as in UNCTAD, 2009), the approach adopted here relied on an empirical analysis of changes in relative prices and their effects on the overall trade deficit.

institutional environment is paramount to estimate the consequences that the introduction of a Palestinian currency might have.

Next to these rather general chances and risks that the literature associates with a national and convertible currency, for the sake of completeness, it should be stressed that Palestine could gain substantial seigniorage revenues from issuing its own currency. In one of the most widely cited studies on this subject, Cukierman et al. (1992) found that between 1971 and 1982, seigniorage as a share of total government revenue often exceeded more than 10 per cent (e.g. 18 per cent in Brazil, 21.7 per cent in Bolivia, 22.0 per cent in Jordan, or 15.3 per cent in Turkey). Although at first sight, these numbers may sound impressive, the authors largely attribute the high shares to institutional and political instability, and only regard seigniorage as an optimal source for government revenues in cases where there is widespread tax avoidance or high costs of tax collection. Other authors arrive at similar conclusions (i.e. Aisen and Veiga, 2006; Aizenman and Jinjara, 2009). Seigniorage should therefore not be considered as a primary motive for introducing a Palestinian currency, but rather as a concomitant benefit. For this reason, the subsequent discussion does not put a strong focus on seigniorage. The institutional and real economic conditions in Palestine carry a much greater weight for realistically assessing the options for sustainable deficit financing – regardless of whether through monetary or capital market financing.

7.2. Bond-market financing

When referring to the term monetary financing, it is understood as monetising government deficits through direct central bank purchases of government debt (what could be commonly referred to as “printing money”).⁷⁰ Admittedly, there can be a fine line between monetary financing via the central bank and capital market financing via private banks. If capital market participants know that the central bank stands ready for purchasing government debt, the latter can arguably take the form of ‘implicit monetary financing’.⁷¹ In either scenario, the risk of default is zero, regardless of the size of the debt. To avoid the contentious debate around the specific definition of each mode of financing government activities, the discussion here examines government-bond financing according to three optional institutional arrangements:

- i. Direct monetary financing: the central bank buys the bonds directly from the government.
- ii. Indirect monetary financing: the central bank acts as a LOLR on secondary markets.
- iii. ‘Pure’ market-based financing: there is no central bank as a backstop, so that public debt carries the risk of default, and its price is determined by ‘pure’ market processes.

It should be noted that the first two options include a central bank that actively intervenes or could intervene, whereas the third option applies to countries issuing debt securities denominated in currencies outside their realm of control.

7.2.1. Direct monetary financing

As briefly stated above, direct monetary financing implies that central banks buy government bonds directly from public authorities. One of the most prominent examples of such an institutional arrangement is found in Canada, where the central bank purchases government debt on a non-competitive basis directly from the state at auctions. The Bank of Canada simultaneously records the value of acquired government securities as an asset and as a liability (deposit in the government’s account at the bank) on its balance sheet. Thus, as in the example in 6.1, the Central Bank created money out of nothing by crediting the government’s account, and the government is free to spend the newly created deposits as it wishes. Since the Bank of Canada is owned by the government, the

⁷⁰ Note that monetisation of government debt could occur via private banks too, if, for example, the government compels private banks to buy and hold government debt, or to lend directly to public institutions (Ryan-Collins, 2015).

⁷¹ Such a situation emerged during the Eurozone crisis, where Art. 123 of the Lisbon Treaty and Art. 21 of the ECB statute explicitly prohibit the ECB to directly purchase government debt. However, with interest rates spiraling out of control, the ECB has intervened in bond markets by buying government debt on secondary markets. At the end of 2017, the ECB had more than EUR 2.3 trillion of government bonds on its balance sheet.

Bank's purchases of public debt securities can be regarded as an internal transaction that merely affected digital accounting entries (Becklumb and Frigon, 2015). Finally, it should be noted that the Bank of Canada also sells government debt to other financial entities, such as banks or investment dealers.

In order to illustrate the process of monetary financing in more detail and compare it to other modes of government bond-financing, the above described process may be presented in a broader and more generalised way. Let us first assume that the government issues new debt securities worth \$ 100 at auction, which are purchased by the central bank. On the balance sheets of both entities, it will be recorded as follows:

Central Bank				Government			
Assets		Liabilities		Assets		Liabilities	
Government Bonds	100	Reserves	100	Reserves	100	Government Bonds	100

If the government now decides to use the newly created deposits to make a purchase of say, a service offered by some domestic private enterprise, the government's net worth will diminish by the corresponding amount. The private sector, however, benefits from the deposits that were transferred through higher net wealth (enterprise) and a higher amount of reserves (bank). For the central bank, nothing changes. The balance sheets of all parties involved now display the following figures:

Central Bank				Government			
Assets		Liabilities		Assets		Liabilities	
Government Bonds	100	Reserves	100	Reserves	100	Government Bonds	100
						Net Wealth	-100

Private Bank				Business Enterprise			
Assets		Liabilities		Assets		Liabilities	
Reserves	100	Deposits	100	Deposits	100	Net Wealth	100

This figure illustrates some important features of direct monetary financing. First, the public debt (negative net worth) of the government matches exactly the net financial wealth of the private sector. In other words, public debt creates private wealth. Moreover, the transaction increased the amount of reserves in the interbank market and should therefore decrease the interbank rate. As opposed to the standard conclusion in neoclassical models, government spending, financed by the central bank, does not increase interest rates and implies no crowding out of private investments, but leads to a fall of the interbank rate.

If the central bank wants to increase interest rates again to meet its target, it needs to absorb the excess liquidity. It could do so by selling the government bonds (against reserves) to the private sector, which would willingly buy these bonds as they generally entail higher returns compared to hoarding reserves:

Central Bank				Government			
Assets		Liabilities		Assets		Liabilities	
Government Bonds	100	Reserves	100			Government Bonds	100
						Net Wealth	-100

Private Bank				Business Enterprise			
Assets		Liabilities		Assets		Liabilities	
Reserves	100	Deposits	100	Deposits	100	Net Wealth	100
Government Bonds	100						

As shown in the next section, the final accounts of all involved agents are *exactly* the same, when financing government expenditures indirectly via secondary markets.

Needless to say, this process of money creation and government financing requires a central bank (with an according mandate) in a sovereign fiat-currency regime. Due to the possibility to provide an unlimited amount of liquidity and credit, the capacities of such institutional arrangements to mitigate the repercussions of financial crises and finance large-scale public investments, for example, in infrastructure, are substantial. Thus, it is of little surprise that issuing government money was central to the industrial development of countries such as Germany, Japan, and the US during the 18th and 19th century (Ryan-Collins, 2015).

Yet, monetary financing of government deficits is often argued to be inflationary, as it allows short-term oriented governments to monetise its deficits without considering long-run implications of such behaviour. Particularly in developing countries, which are often characterised by political instability, a narrow tax base, and limited access to foreign capital, policymakers are inclined to opt for monetary financing (Alesina and Drazen, 1989; Catao and Terrones, 2005). In most developed countries, on the other hand, the close ties between central banks and their governments were, beginning in the 1970s, increasingly regarded as carrying the seeds for runaway inflation, so that a low inflation equilibrium could only be achieved by insulating monetary policy from political cycles (Alesina and Summers, 1993). “Independent” central banks were henceforth required to keep inflation low, regardless of the political costs. Policymakers, in turn, ought to focus on structural reforms to enhance efficiency and flexibility.

Whilst it certainly should be acknowledged that monetary financing risks feeding into higher inflation rates, the question as to whether such monetary policy should be employed has to be assessed context-specifically. If, for example, an economy runs at full capacity, monetary financing is bound to be inflationary. However, if a country’s capital stock is non-existent or severely depleted, as it is the case in most developing countries, monetary financing can be a powerful development tool, if invested in infrastructure and technological development. There appears to be no convincing theoretical or empirical rationale to rely on ‘foreign capital’ to finance investments (especially as this would defy much historical evidence of economic development, most notably the history of Japan and Canada (cf. Ryan-Collins, 2015)). Moreover, even if monetary financing were concomitant with higher inflation rates, this would not necessarily damage a developing country’s longer-term development prospects. Again, reference is made to the experiences of most recently industrialised economies in South-East Asia, such as South Korea, whose inflation rate averaged at almost 20 per cent during the 1960s and 1970s (Chang, 2011), and the weak and inconclusive empirical support for regarding low inflation as a universal *sine qua non* condition for economic growth.⁷² This is not to argue that price stability is an irrelevant objective, even for developing countries, yet it is important not to overstate the dangers of monetary financing when undertaken in the *right* context. Finally, it should be noted that the fear of inflation through monetary financing is often rooted either in rational expectation assumptions, a general objection to public deficits, or a misunderstanding of the monetary system (cf. Cagan, 1956; Sargent and Wallace 1975, 1981; Edwards and Tabellini 1991; Dornbusch, 1992).^{73,74}

7.2.2. Indirect monetary financing

As opposed to direct monetary financing via central banks, governments can issue bonds to be purchased on secondary markets. In this scenario, financial institutions buy government bonds, which

⁷² Barro (1996) finds that inflation rates below 10 per cent do not have any effects on growth, which is similar to Sarel’s (1996) conclusion. Bruno (1995) and Bruno and Easterly (1998) put this threshold even between 20 to 40 per cent. More recently, Blanchard et al. (2010) stressed the necessity to further improve the hitherto “[poorly understood] relationship between activity and inflation.”

⁷³ Rational expectations assumptions in this context imply that an increase in money supply from the central bank will increase the velocity of money through widespread rational substitution of an economy’s real money base for non-monetary assets (i.e. government bonds), which would feed into an inflationary spiral (Ryan-Collins, 2015).

⁷⁴ This also includes financing government deficits via bonds on capital markets.

they can use as collateral to obtain further loans from the central bank.⁷⁵ Although the specific auctioning mechanism varies across countries, it is the most common institutional arrangement in developed economies. Its main advantage is that it provides a seemingly market-based incentive scheme for government finance yet guarantees financial stability at the same time. This form of financing government activity may be termed indirect monetary financing, as the (interventionist) presence of central banks ensures that public debt remains essentially a safe asset. The knowledge that a central bank is there to act as a LOLR and, if necessary, to buy government debt securities, serves as a stabilising force in bond markets and keeps interest rates reasonably low. Moreover, in principle (i.e. from an accounting perspective), it does not make any difference whether bonds are sold to the central bank directly or via secondary markets. Whilst most free-market economists, such as Hanke and Schuler (2015), amongst others, regard the concomitant zero risk of default on public debt as the key problem for fiscal discipline, this study argues that central bank intervention is critical for financial market stability as a whole.

To better understand the differences and similarities to direct monetary finance, the analysis first outlines the accounting dynamics behind the transactions. As a first step, let us assume that for a private bank to be able to acquire newly issued debt securities worth \$ 100, it must take on a loan from its central bank, so that:

Central Bank				Private Bank			
Assets		Liabilities		Assets		Liabilities	
Loan	100	Reserves	100	Reserves	100	Loan	100

Once the private bank purchases the government debt, it obtains the security in exchange for its reserves:

Government				Private Bank			
Assets		Liabilities		Assets		Liabilities	
Reserves	100	Government Bonds	100	Government Bonds	100	Loan	100
				Reserves	100		

As in the case above, let us assume that the government uses its reserves to purchase a service from a domestic enterprise, hence:

Central Bank				Government			
Assets		Liabilities		Assets		Liabilities	
Loan	100	Reserves	100	Reserves	100	Government Bonds	100
						Net Wealth	-100

Private Bank				Business Enterprise			
Assets		Liabilities		Assets		Liabilities	
Government Bonds	100	Loan	100	Deposits	100	Net Wealth	100
Reserves	100	Deposits	100				

If the private bank pays back the loan it obtained from the central bank in the first step, it will do so by paying with its reserves. This means that both the reserves on the asset side and the loan on the liabilities side of the balance sheet will disappear (and vice versa for the central bank):

⁷⁵ Banks can and do use government bonds also for hedging against more volatile investments, such as collateral in repo transactions, for meeting regulatory requirements and managing (short-term) liquidity, or for evaluating longer-term interest rates fluctuations. Moreover, government bonds serve as a benchmark for other securities, as further discussed below.

Central Bank		Government	
Assets	Liabilities	Assets	Liabilities
Loan 100	Reserves 100		Government Bonds 100
			Net Wealth -100
Private Bank		Business Enterprise	
Assets	Liabilities	Assets	Liabilities
Government Bonds 100	Loan 100	Deposits 100	Net Wealth 100
Reserves 100	Deposits 100		

Thus, the balance sheets of all parties are *exactly* the same as in direct monetary financing. Moreover, as in the case of “printing money” through its own central bank, the emission of government bonds has created deposits for the private sector, and the financial deficit of the government matches the financial surplus in the private sector.

Even though some authors argue that direct monetary financing is more beneficial to society, as interest payments on the debt are accrued to public institutions (cf. Turner, 2014), for the purpose of this paper, both modes of bond financing with a sovereign central bank in a fiat-currency regime appear the most desirable institutional arrangement to guarantee stable government finance.

7.2.3. ‘Pure’ market-based financing

Finally, there is the option of what may be referred to as ‘pure’ market-based financing. This entails the absence of a central bank as a LOLR, so that government debt carries the risk of default. The basic idea is that this way, the market will discipline the government not to run any (inflationary) fiscal deficits, as higher deficits would come at higher costs of borrowing.

More specifically, the argument departs from the view that financial markets operate based on a logic of supply-and-demand for loanable funds. These loanable funds can be regarded as any other normal good, for which the price is set by the interest rate (Mankiw, 2013). The supply of loanable funds is savings, whereas investment constitutes the demand for these funds. Within this framework, banks and other financial institutions serve as intermediaries. As in any market, the price (here, the interest rate) will eventually equilibrate demand and supply, so that “at the equilibrium interest rate, households’ desire to save balances firms’ desire to invest, and the quantity of loanable funds supplied equals the quantity demanded” (ibid., p. 69). Note that this also implies that the amount of savings equals investments, and that the former predetermines the latter.

Given the underlying assumptions, interest rate movements are determined by private or public investments (which raise interest rates) and private or public thrift (which lowers them). Thus, if the government decides to spend, it reduces the amount of savings in the economy. This, in turn, leads to higher interest rates, crowds-out investments from the private sector, and entails higher payments on national debt. Although different versions of loanable funds theory were proposed in the literature, such as the extension by Robertson (1934) and Ohlin (1937), who include money creation through credit, the essence of the theory does not change. Put simply, in case of an expansion of credit through private banks, genuine savings are added to the supply of loanable funds, which causes the interest rate to fall. Hence, at some point, the demand for investments will pick up, until the supply of and demand for loanable funds is in equilibrium (Bibow, 2001).

It is important to note that this theory has much wider systemic implications. Since it is assumed that the interest rate turns all savings (S) automatically into investments (I), as $S=I$, any increase in savings does not adversely affect economic output. Instead, investments will increase by the same amount, as higher savings lower the interest rate and households compete for interest-bearing investment opportunities. Thus, the theory suggests that higher investments in the economy can only be achieved through higher savings. As laid out by Flassbeck (2013), the controversy about the causality of $S=I$ goes back to Keynes (1930), who argues that an increase in savings diminishes corporate profits

correspondingly. Consequentially, when profits decline, the supply of funds increases by the exact amount as the demand for loans, since firms need additional funding to finance their investments. This implies, however, that the interest rate cannot fall, so that there will not be any additional investment. Even more so, considering that firms operate under fundamental uncertainty, lower demand and corporate profits will most likely incentivise firms to adjust their output accordingly and lower investment activities. As national income falls with lower investments, savings will likewise decrease, so that $I=S$ is fulfilled. Yet, it should be noted that contrary to loanable funds reasoning, reverse causality is actually in place, as investments determine savings.

Therefore, in sum, the conclusions derived from loanable funds theory for the functioning of a market economy are not only empirically wrong but induce policymakers to depress economic growth. Despite ample empirical evidence for this, however, the idea that states should not intervene in markets and be themselves regarded as regular market participants, is still widespread. Otherwise, it is argued, there is no incentive for fiscal prudence, and inflationary deficits would dampen long-term economic growth.

There are two institutional arrangements in which market-based principles would work. One is to borrow in a currency over which a government has no control, the other is to confine the central bank in its monetary policy options. Most prominently, the Eurozone tried to institutionalise a hybrid form of both by prohibiting the ECB or any other central bank to *directly* purchase government debt from public authorities, and formally insulate monetary policy from national governments. However, the centrifugal forces that set in with the outbreak of the Eurozone crisis, most clearly indicate how volatile interest rates can become, as soon as market participants sense a risk of default for government bonds. Uncertainty, fuelled by speculation, exacerbated the situation for highly constrained governments until the ECB stepped in as a *de facto* LOLR and normalised interest rates through open market operations.

7.3. The role of government bonds and central banks in financial stability

Although many economists regard the cooperation of a central bank with public authorities (i.e. Treasury) as a distortion of market incentives, the technical and accounting processes behind money creation and payments make such cooperation necessary, if a chronic turmoil in interbank markets is to be avoided. As outlined in section 6, central banks set the interest rate target, which serves as the anchor for all other short-term interest rates. The interest rate target itself is met by controlling the amount of reserves in the banking system through open market operations, i.e. buying government bonds or other securities (Bell, 2000; Fullwiler, 2006). If an interest rate target does not exist, or a central bank is constrained in its ability to conduct open market operations, there is no convergence towards a natural or equilibrium interest rate, as the neoclassical conception postulates, precisely because of how the monetary system works.

In this regard, it is crucial to understand the difference between the fictitious version of financial markets in most neoclassical economic theory, and their actual functioning. As shown above, the government spending *creates* reserves in private bank accounts. Equally, when central banks intervene in FX markets to stabilise exchange rates, these transactions add to the reserves or settlement balances of commercial banks. On the other hand, tax payments and the settling of banks' liabilities with their central bank and account holders reduce the amount of reserves (Lavoie, 2005). Thus, in sum, *any* monetary transaction of and with public authorities (government and central bank) consequentially affects the amount of reserves in the banking system. To ensure that, at the end of the day, commercial banks have the desired amount of reserves, so that interest rates remain stable, central banks *must* neutralise settlement balances by correspondingly transferring government deposits between their own accounts and that at private banks, and/or engage in open market operations. Lavoie (2005) has termed this the “defensive operations” of central banks, which are, given the systemic importance of interbank rates for financial markets, critical to prevent market

turmoil. Without such defensive operations, interest rates would be extremely volatile, dependent on the relative scarcity or abundance of reserves.⁷⁶

The role of government bonds for central banks' open market operations and their distinct quality as a safe asset make them the backbone of most fixed-income security markets in developed and developing countries alike (World Bank, 2001). This is most strikingly illustrated by the data in table 6, which show the composition of debt markets in selected countries and the large share of government securities.

Government bonds provide the benchmark yield curve for other securities, and, as such, they affect the trajectory of the overall credit curve in the economy. Contrary to equity securities in the private sector, which entail ownership rights over a respective company's assets (so that eventual losses may be recovered through the sale of these assets), government securities are not based on any capital assets but only on a government's ability to service and repay its debt. This ability, in turn, will determine the price of national debt and depends on the institutional arrangement in that particular country. As outlined above, a government issuing debt in its own currency and having its own central bank will always be able to settle its liabilities. As the entire debt market hinges on government bonds, it is critical for stable financing conditions in the entire economy, that a central bank is able to intervene in bond markets and that government bonds are issued in national currency.

7.4. Capital market constraints in Palestine

Whilst above arguments speak against the issuance of government bonds in a foreign currency, the size of the domestic capital market in Palestine further discourages such endeavours. Given the state of the Palestinian economy and the fragile political environment, it is highly uncertain whether international investors would buy such government debt securities (if anything, they would most likely come at an exorbitant price). In such circumstances, the structure of the domestic capital market becomes even more important.

Table 7: Composition of Debt Markets in Selected Countries.

Composition of Debt Markets in Selected Countries (Total Debt Securities, Amounts Outstanding)				
	All Issuers in Billion USD (Q4 17)	Financial Corporations (Q4 17)	Non-Financial Corporations (Q4 17)	General Government (Q4 17)
US	39,336	39%	16%	45%
Japan	12,666	19%	6%	75%
United Kingdom	6,024	45%	9%	46%
Germany	3,712	42%	6%	52%
France	4,597	35%	16%	49%
Italy	3,298	25%	5%	70%
Israel	260	12%	25%	63%
Brazil	251	43%	29%	28%
South Korea*	1,974	37%	31%	32%
China	11,757	38%	24%	38%
Chile	251	43%	29%	28%
Mexico*	784	25%	25%	50%

⁷⁶ If, say, the government were to invest, the corresponding amount of reserves would be created. An abundance of reserves, in turn, would lead to a sharp fall in the interbank rate, unless the central bank intervenes by withdrawing excess reserves to bring interest rates up to its desired target. Conversely, if reserves were scarce for some reason, the concomitantly high demand could lead to interbank overnight rates spiralling out of control.

Composition of Debt Markets in Selected Countries (Total Debt Securities, Amounts Outstanding)				
	All Issuers in Billion USD (Q4 17)	Financial Corporations (Q4 17)	Non-Financial Corporations (Q4 17)	General Government (Q4 17)
Turkey	276	22%	3%	75%
Poland	342	15%	10%	75%
Czech Republic	211	53%	8%	39%
Singapore	412	46%	33%	21%
Thailand	368	39%	24%	37%
Malaysia	370	12%	42%	46%
Hungary	119	8%	2%	90%
Russia	491	26%	40%	34%

*Note: Data for South Korea and Mexico is the sum of domestic and international debt securities.
Source: BIS; Own Calculations.

A recent World Bank (2015) report notes that domestic capital markets become, more generally, an increasingly popular source for funding government activities in emerging markets, with 85 per cent of public debt outstanding on average. Yet, the downside to most government debt markets in emerging economies is low liquidity of debt securities. This results out of a variety of factors, such as a small size of the capital market, low savings of the investor base, or an inefficient market infrastructure. The lack of liquidity leads to higher prices, as investors demand a premium for holding illiquid government securities,⁷⁷ and, more importantly, no build-up of a reliable yield curve that could serve as a (zero-risk) reference point for other securities and investors alike (ibid.).

In Palestine, a number of these structural features may be discerned, which constrain efficient capital market-based financing. First, as shown in section 6.2.1, very few firms comprise the domestic capital market,⁷⁸ which would entail high transaction costs and little competition, as well as low liquidity. Furthermore, this market structure rules out the option of introducing a primary dealer system, which is generally regarded as one of the best ways to develop a market for government securities, as it facilitates the generation of stable demand and lowers the costs of funding (World Bank, 2010). Thus, the PNA cannot rely on financial intermediaries to engage in market-making activities, which might exacerbate the volatility of interest rates.

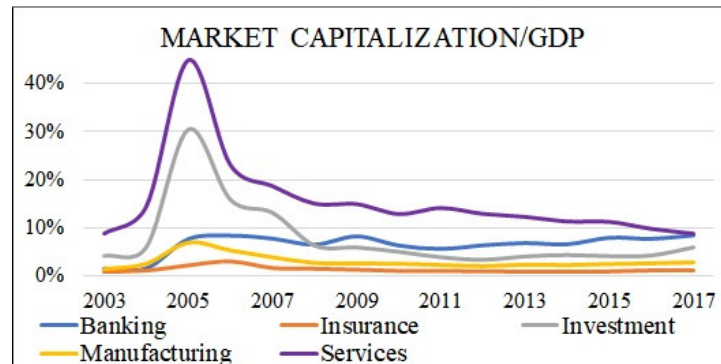
Secondly, not just the small number, but also the size of these firms makes it questionable as to whether the financial institutions, which normally ought to absorb demand for government debt securities (i.e. banks, investment banks, mutual funds, insurance companies, or pension funds) have the capacities to do so in any meaningful way. Despite the emergence and growth of the financial sector in Palestine since the signing of the Oslo Accords (World Bank, 2008), the market capitalisation of the firms remains a fraction of GDP, as figure 26 indicates. More specifically, with regards to key indicators of the Palestinian securities sector, in 2016 the value of all traded securities was below USD 500 million, whereas the total market value of all company shares on the Palestine exchange (PEX) amounts to USD 3.4 billion (PMA, 2016a). As shown in sections 2 and 3, the current Palestinian trade deficit alone exceeds USD 5 billion. Also, to foster secondary market activities in government debt, the literature considers large and relatively liquid lines of government securities, so called benchmark securities, as critical (World Bank, 2015). Thus, given the structure and size of the capital market in Palestine, only a fraction of government debt could be absorbed domestically. As a corollary of this, Palestine would have to rely on foreign investors to purchase government debt.

⁷⁷ This problem is ultimately imputable to institutional arrangements and central bank operations. As we have shown above, the price for government debt, if issued in a domestic currency, is entirely determined by the amount of securities the central bank is willing to buy.

⁷⁸ The most recent figures identify 15 (small) banks, 6 specialised lending institutions, 276 money changers (of which 56 are individuals), 48 companies listed on the Palestinian stock exchange, 9 licensed insurance companies, 11 leasing sector companies, and 1 firm in the mortgage financing sector (PMA, 2016a).

Considering the dire state of the economy and overall political fragility, it is doubtful if any investors were willing to accept reasonable interest rates for these bonds.

Figure 26: Sectoral Market Capitalisation to GDP



Source: PMA; Own calculations.

Third, even if the domestic capital market were large enough to absorb a significant proportion of government debt securities, the functioning of the monetary system and the consequences of decades of deteriorating economic conditions would make a sustainable and effective financing of the government deficit impossible. As outlined in section 6, the Palestinian economy has suffered from a drain of foreign reserves (and, to a lesser extent, the build-up of liabilities) to finance its current account deficits. If banks now were to purchase government debt, this would lower the amount of anyhow scarce reserves in the banking system, with adverse effects on interest rates. The PMA cannot function as a proper central bank in this regard, as it relies on (a depleting stock of) reserves itself.⁷⁹ Moreover, trying to go beyond the financial sector as a source of funding is equally not feasible, as the private sector at large has been the most substantial net-debtor out of all sectors of the Palestinian economy (cf. section 4).

In sum, a virtually non-existent domestic investor base (both institutional and private), lack of interest from foreign investors, as well as grim economic and political conditions are most likely to destabilise government financing via capital markets. Also, considering the inherently instable and volatile nature of capital markets without a LOLR, the PNA should be discouraged from trying to finance the Palestinian deficit by issuing government bonds in a foreign currency, as it would wreak havoc on the economy. A further issue, not explicitly addressed in this paper, is that such market-based financing is very short-term oriented. Hamed (2017) argues, that banks are reluctant to lend longer-term, so that maturities of government bonds are unlikely to exceed one year. As argued in this report, however, Palestine needs a long-term development strategy, which is a further reason to move towards a Palestinian currency and an interventionist central bank. (Mazzucato and MacFarlane, 2018).

7.5. Conditions for introducing a Palestinian currency

Having excluded the option for financing the government deficit via ‘pure’ market-based financing, the analysis turns to the potential merits of direct or indirect monetary financing. As the introduction of a Palestinian currency and a national central bank are a prerequisite for this, the focus here is on questions of the feasibility of such institutional reforms. It is found that current legal restrictions and, more importantly, real economic conditions would almost certainly lead to an outright failure of such policy measures. This leads to the conclusion that re-negotiating the Paris Protocol (PP) and fixing productive capacities through strategic economic interventions are indispensable, prerequisite, steps towards monetary sovereignty.

⁷⁹ A minimum requirement for bond financing is a credit facility with the BoI. Given the cooperation of the PMA with the BoI in relation to the problems of transferring excess liquidity, the possibility for introducing such a facility appears reasonable. Regardless of our conclusions in this report, it is a recommended significant short-term measure to improve the PNA’s capacities to conduct monetary policy.

7.5.1. Legal restrictions

The current regulations, as set out in Article 10 of the PP, restrict the options for Palestine to unilaterally introduce its own currency and obliges the PNA to accept *any* circulating currency, including the NIS, as a means of payment. This implies that the critical feature to guarantee widespread acceptance and demand for a given currency, namely its *unique* ability to settle tax obligations, is ruled out *a priori*. Moreover, since a substantial amount of national income is attributed to Palestinian workers in Israel (cf. section 4), this means that a large part of the population will find it much more convenient to pay taxes in NIS. The requirement that the PNA must also accept any other circulating currency as a means of payment makes it likely that a newly introduced Palestinian currency would be simply one amongst several, which would also exacerbate the difficulties for the PMA to control the desired level of reserves to meet its interest rate target. Finally, since a critical feature of *any* currency is that it is backed by state authority, it implies that the PNA must develop strong institutional capacities and a solid governing system⁸⁰ to ensure full acceptance and usage of the Palestinian currency.

The second restriction relates to Article 10 paragraph b, which requires prior consultations through the Joint Economic Committee (JEC) and the consent of Israel, if Palestine were to introduce its own currency. As mentioned in section 3, however, the JEC is effectively dead since 2009. It would therefore require a renewed start of the committee, or the formation of some other joint-body that could discuss and agree upon a Palestinian currency. Yet, on the other hand, this arrangement illustrates the supposedly interim nature of the Paris agreement, and the recognition of the long-term inadequacy of the arrangements that were put in place in 1994. It might therefore provide a starting point for negotiations towards achieving the goals that were originally stipulated the Oslo Accords.

7.5.2. Real economic conditions

Whilst legal restrictions limit the scope of unilaterally introducing a Palestinian currency, the real economic conditions are the bigger problem. Given the weak productive basis, and disproportionate trade and current account deficits, introducing a currency, which would substantially devalue vis-à-vis other currencies, would not have any beneficial effects in the foreseeable future.

This discouraging conclusion is grounded in the detailed analysis of Palestinian economic development. Section 2 has shown that Palestinian exports are not sensitive to changes in relative prices. This means that the most important channel through which a devaluation can boost a country's economic performance, namely via positive demand effects from abroad, will only have limited effects in Palestine. The reasons for this are an excessively cumbersome regulatory regime, as imposed by Israel, and a substantial weakening of the productive base (cf. sections 2 and 3). In addition, the strong reliance of the Palestinian economy on domestic consumption, services, and real estate, also feeds into the low-price sensitivity of its exports. Furthermore, there is no evidence for an import substitution effect through a devaluation, yet only gradually diminishing consumption, which adversely affects nominal GDP growth.

On the other hand, a large currency devaluation would most likely lead to a significant imported inflation. Consequently, people might prefer to hold on to foreign currencies, such as NIS or USD, especially as these currencies are likely to remain in circulation and constitute a large share of foreign income (cf. section 4). Moreover, depending on the inflation dynamics, the PMA – in function as a fully-fledged Palestinian central bank – might be forced to raise interest rates to exorbitant levels, which would further depress investments. Given the small size of the Palestinian domestic market, a development strategy needs to rely on a strong export sector to benefit from economies of scale. Whilst exchange rate management is certainly an important element in that, it is insufficient without a solid productive base and state-driven development strategy.

⁸⁰ This applies in relation to tax collection, but also institutional safeguards to limit potential policy abuse and government failure in executing monetary policy.

Next to the weak price sensitivity of Palestinian exports and no evident import substitution effect, current conditions also raise the question as to how the price finding mechanism for a new currency would work. As argued above, large deficits are most likely to persist even after a devaluation. If the currency was fully convertible, this could increase the pressure for further devaluation in FX markets, with speculators shorting the national currency to profit from its collapse. As a central bank's ability to defend the value of a currency depends on the amount of its reserves and effective cooperation amongst central banks in general, achieving a stable exchange rate, and thus stable prices, would become incredibly difficult, if not impossible. An alternative for the PNA might be to set limits to the convertibility of the Palestinian currency, which, however, could simply lower its acceptance and incentivise the use of foreign currencies (esp. if the PP in its current form were still in place). Thus, unless the external sector is stabilised prior to the introduction of a national currency, the large deficits would most likely entail extreme volatility in exchange rates.

Finally, it should be pointed out that the stark external sector imbalances substantially impede the proper functioning of a transitory regime. In the literature, there appears to be a broad consensus that a currency board would be the most suitable institutional arrangement, until Palestine can operate with a fully sovereign currency and central bank (cf. Hamed, 2000; UNCTAD, 2009). However, as a currency board is contingent upon the accumulation of reserves, implementing it whilst running such disproportionate trade and current account deficits would merely cause the economy to bleed out and eventually succumb.

Hence, in summary, while recognising the merits of a national currency as critical to conduct independent monetary policy and exchange rate management, as well as stabilising government deficit financing, a clear distinction must be made between short-term and long-term objectives. Thereby, the introduction of a Palestinian currency should be considered as a long-term goal, which requires meeting certain institutional and economic conditions, none of which are currently in place. On the contrary, the analysis here suggests that because of existing productive capacities and macroeconomic imbalances, the introduction of a Palestinian currency would do more harm than good. Yet, even beyond the short-run, it is illusionary to think that a national currency will, by itself, serve as a panacea to achieve sustained growth and development.

8. Conclusions and policy recommendations

In order to answer the question of sustainable deficit financing, this study's conclusions have been grounded in an extensive analysis of the institutional and economic conditions. Section 2, analysing key indicators of Palestinian development, identified a high reliance of growth on domestic consumption, an erosion of productive capacities, and a substantial fall in real wages as well as lower revenues from grants and donations in recent years. Whilst lower real wages and foreign transfers reduced imports and thereby the current account and trade deficit, the size of these deficits remains unsustainable. Moreover, Section 3 emphasized the defunct nature of the Paris Protocol, which requires a comprehensive overhaul to end the excessive dependence on Israel in matters of trade and clearing revenues. The financial accounts of the Palestinian economy, as presented in Section 4, essentially reflect the trends outlined in the previous two sections.

The most important new findings include (i) the extensive reliance on inflows of foreign assets (via transfers and foreign income), and (ii) the absence of domestic savers. In addition, Palestine's current account deficit was largely financed by the withdrawal from bank's foreign assets and capital grants, and the selling of reserve assets. Section 5 provided more detail on the composition of fiscal revenues, expenditures, and public debt, and showed why, despite large deficits, Palestine's official debt-to-GDP ratio did not increase over time. Most notably, foreign assets and, more recently, the accumulation of arrears obfuscated the negative impact these deficits would have normally had on the public budget. Finally, section 6 highlighted the increasing importance of the NIS as a legal tender and the extent of the diminishing stock of foreign reserves.

Based on the above analysis, it is concluded that, under current circumstances, neither bond issuance denominated in a foreign currency, nor the introduction of a national currency can provide a sustainable means for financing the Palestinian deficit. While the former would entail highly volatile interest rates and financial instability, the latter would most likely lead to imported inflation and potentially even exacerbate the Palestinian deficit, without any significant advantage to the export sector.⁸¹

Stabilising the external sector is a prerequisite for both modes of deficit financing. To pursue the preparations for the introduction of a national currency for future bond issuance several steps are must be taken. First, the outdated Paris Protocol has to be renegotiated. Similar to the conclusions of most research from international institutions on this subject, the inadequacy of these regulations as well as the concomitant economic hardships and constraints for Palestine make this a necessity. A new framework for economic governance is urgently needed to (1) give the PNA more scope for developing trade relationships with third countries, (2) lower the barriers to physical mobility, (3) eliminate excessive administrative burdens for Palestinian firms, (4) provide a transparent import clearing mechanism to ensure the PNA is not deprived of legitimate trade revenues, and (5) allow Palestine to protect domestic industries.

Second, notwithstanding the very limited options for sovereign economic policies under current agreements, a revitalisation of the productive base is a *sine qua non* condition for both capital markets based financing and monetary financing. This report has shown the deterioration of the productive basis in the industrial and agricultural sectors. An increasing share of private investments went into services, retail, and construction and real estate. Moreover, as government spending decreased due to declining revenues from grants and donations, the historically low share of development expenditures became miniscule. Given these economic conditions, a devalued Palestinian currency will not be sufficient to trigger an economic recovery. Rather, a more fundamental shift in economic policymaking is needed to foster a reindustrialisation process and promote merchandise exporting sectors, such as agriculture and manufacturing.

⁸¹ Based on correspondence with the PMA, it should be noted that currently, 55 per cent of inflation is imported inflation. Given the current economic conditions and imbalances in the external sector, it is most likely that the value of a Palestinian currency would exacerbate this problem substantially.

Due to the tight budgetary constraints that have been identified, including the drain of Palestinian reserves and the accumulation of arrears and other liabilities, the difficulty to raise the required funds for these investments should not be underestimated. Therefore, the PNA should first intensify its efforts to obtain funds from external donors, and eventually widen the scope of international partnerships (e.g. with a focus on Asia). The use of these grants should be embedded in a broader development strategy, so that donors would be reassured that the funds are *directly* invested in infrastructure and productive activities (not consumption!). Secondly, any legal restrictions on government debt accumulation should be avoided. Such a stance poses an entirely arbitrary limit to government finance, whilst disregarding saving and investment positions of other sectors.

As long as a debt limit is not imposed, the government could take on extra credit with the PMA, where some room for manoeuvre appears to exist. The PMA, in turn, could enhance its capacities through a closer cooperation with the BoI, which should – at least – include the establishment of a credit facility to ease access to NIS reserves. This would also be another step towards creating a better investment climate by stabilising inflation and real interest rates,⁸² which would make it easier to get access to longer-term credit arrangements and minimise the risk of default. Rather than crowding out the private sector, such *strategic* public spending would induce the opposite, namely incentivising private investments in export sectors (and would minimise further concentration of investments in consumption and real estate/construction).

Although acknowledging the risks associated with higher public debt in an economy with no lender of last resort, the above strategy is necessary to rectify the large imbalances through increasing the share of exports and therefore reducing the dependence on foreign currency reserves, as well as the vulnerability to Israeli clearance suspensions in the long-run. Otherwise, if the government were to cut investments and spending, this would not only sustain the current economic malaise, but it might further dampen prospects for economic growth, worsen Palestinian unemployment rates, and fuel social unrest.

In the long-run, productive investments would revitalise the deteriorated productive base and enhance productivity. The concomitantly better performance of Palestinian export sectors would stop the drain of foreign assets and potentially even lead to the accumulation of reserves. During the transitory period, in which the Palestinian economy will depend on foreign aid, Palestinian authorities might encourage foreign banks to further increase their deposit holdings in the banking sector, if they can credibly explain their medium-term strategy. Furthermore, if the PMA had a credit facility at the BoI and could serve as a LOLR for the private and the public sector, the risk of a currency crisis during this expansionary period would be mitigated.

In light of current economic problems and the de facto bankruptcy of the Palestinian state, the urgency of rethinking economic policymaking in Palestine cannot be overstated – notwithstanding the excessive constraints and hardship that Israeli occupation entails. Especially a revitalisation of the productive base, as part of a wider development strategy, will be key to reduce Palestinian dependence on Israel and stabilise the current account and trade balance. If the status quo persists, however, it is hardly possible to see how Palestine can break the vicious cycle of an erosive productive structure, continuous deficits, and an ongoing dependence on Israel (and foreign capital more broadly). Unless the PNA wants to risk high volatility and a financial turmoil, the current political and economic circumstances do not give the PNA any options for financing the government deficit by issuing bonds. The most important conclusion derived from this analysis is that, before turning towards capital markets for funding *or* introducing a national currency, the Palestinian authorities need to take strategic action to stabilise the external sector first and put the economy on a more sustainable trajectory.

⁸² As shown in section 2, this will also require productivity-oriented wage policies. Hence, the suggestions made in the proposal of the Palestine Economic Policy Research Institute (MAS) in favour of social protection programmes, strict enforcement of minimum wage policies and labour rights, and regulation of the informal sector, are noteworthy policy conclusions that should be further pursued (PMA 2016a).

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Statistical Annex

Appendix A: Deriving Employment Data for Gaza, West Bank and Palestine

Combining labour market data with GDP data in Palestine can be misleading for at least two reasons: First, labour market data includes territories like Jerusalem (J1 and J2), while the GDP data does not. Moreover, many people living in one region might work in a different one, as shown by the substantial fraction of Palestinians who work in Israel or Israeli settlements. When deriving measures like productivity per working hour, this should be considered. Second, there could be strong differences between economic activity in Gaza and the West Bank, so that aggregating both regions could lead to an average trend that fits neither region.

Data restrictions prevent us to account for these difficulties in a perfect manner. However, we were able to use data on the distribution of employment for Gaza and the West Bank to get an impression of the different developments in both regions. We first derive data for regional employment (independent from the actual residence). This is done in Table A1 on the next page. In the next step we can combine this data with data on average wages and working hours to derive real wages per working hour. This is done in Table A2. Finally, Table A3 derives productivity per working hour and unit labour costs for Gaza, West Bank and Palestine.

Figure A1 illustrates that the development in Gaza is much worse than in the West Bank, as expected, but also shows that the dynamics in the entire State of Palestine are not completely driven by the data from Gaza. Hence, we believe using data for Palestine as a whole is a reasonable approach, whilst at the same time, keeping in mind the differences between the two regions.

Table A1: Regional Employment in Palestine

Year	PERSONS LIVING IN GAZA						PERSONS LIVING IN WEST BANK						REGIONAL EMPLOYMENT			
	Distribution of employment			Employment			Distribution of employment			Employment			GAZA	WB	Israel & Settlement	PALESTINE
	WB	Gaza	Israel & settlement	Total	Gaza	WB	WB	Gaza	Israel & settlement	Total	Gaza	WB	(in1000s)			(w/o Israel & settlement)
1995	0,3	96,4	3,3	109	105,08	0,33	79,7	0,1	20,2	308	0,31	245,48	105,38	245,80	65,81	351,19
1996	0,6	91,3	8,1	114	104,08	0,68	83,4	0	16,6	315	0,00	262,71	104,08	263,39	61,52	367,48
1997	0,3	88,7	11,0	129	114,42	0,39	80,1	0,4	19,5	352	1,41	281,95	115,83	282,34	82,83	398,17
1998	0,3	83,5	16,2	149	124,42	0,45	75,8	0,2	24,0	400	0,80	303,20	125,22	303,65	120,14	428,86
1999	0,7	83,6	15,7	170	142,12	1,19	74	0,1	25,9	418	0,42	309,32	142,54	310,51	134,95	453,05
2000	3,0	84,4	12,6	168	141,79	5,04	78,5	0,1	21,4	404	0,40	317,14	142,20	322,18	107,62	464,38
2001	2,1	96,1	1,8	127	122,05	2,67	83,6	0,0	16,4	353	0,00	295,11	122,05	297,78	60,18	419,82
2002	0,7	96,8	2,5	129	124,87	0,90	88,0	0,0	12,0	323	0,00	284,24	124,87	285,14	41,99	410,02
2003	0,1	96,8	3,1	166	160,69	0,17	88,8	0,0	11,2	371,0	0,00	329,45	160,69	329,61	46,70	490,30
2004	0,1	98,8	1,1	155	153,14	0,16	89,3	0,0	10,7	396,0	0,00	353,63	153,14	353,78	44,08	506,92
2005	0,1	99,5	0,4	175	174,13	0,18	87,1	0,0	12,9	428,0	0,00	372,79	174,13	372,96	55,91	547,09
2006	0,1	99,8	0,1	169	168,66	0,17	88,3	0,0	11,7	467,0	0,00	412,36	168,66	412,53	54,81	581,19
2007	0,0	100,0	0,0	201	201,00	0,00	87,5	0,0	12,5	489,0	0,00	427,88	201,00	427,88	61,13	628,88
2008	0,1	99,9	0,0	178	177,82	0,18	86,2	0,0	13,8	489,0	0,00	421,52	177,82	421,70	67,48	599,52
2009	0,0	100,0	0,0	189	189,00	0,00	86,1	0,0	13,9	529,0	0,00	455,47	189,00	455,47	73,53	644,47
2010	0,0	100,0	0,0	193	193,00	0,00	85,8	0,0	14,2	551,0	0,00	472,76	193,00	472,76	78,24	665,76
2011	0,0	100,0	0,0	243	243,00	0,00	86,0	0,0	14,0	594,0	0,00	510,84	243,00	510,84	83,16	753,84
2012	0,1	99,9	0,0	256	255,74	0,26	86,2	0,0	13,8	602,0	0,00	518,92	255,74	519,18	83,08	774,92
2013	0,1	99,9	0,0	267	266,73	0,27	83,9	0,0	16,1	618,0	0,00	518,50	266,73	518,77	99,50	785,50
2014	0,1	99,9	0,0	249	248,81	0,19	83,9	0,0	16,1	668,0	0,00	560,21	248,81	560,40	107,79	809,21
2015	0,1	99,9	0,0	278	277,72	0,28	83,5	0,0	16,5	685,0	0,00	571,98	277,72	572,25	113,03	849,98
2016	0,1	99,9	0,0	290	289,71	0,29	83,0	0,0	17,0	690,0	0,00	572,70	289,71	572,99	117,30	862,70

Source: PCBS.

Table A2: Annual wages and hours worked in Gaza, West Bank and Palestine

Year	GAZA							WEST BANK							TOTAL	
	Monthly Days	Daily Wage	Annual Wage	Empl.	Annual Sum of Wages	Weekly Hours	Annual Hours Worked	Monthly Days	Daily Wage	Annual Wage	Empl.	Annual Sum of Wages	Weekly Hours	Annual Hours Worked	Annual Sum of Wages	Annual Hours Worked
	A1	B1	C1=12·A1·B1	D1	E1=C1·D1	F1	G1=52·D1·F1	A2	B2	C2=12·A2·B2	D2	E2=C2·D2	F2	G2=52·D2·F2	E1+E2	G1+G2
		(NIS)	(NIS)	in 1000s	(NIS)				(NIS)	(NIS)	in 1000s	(NIS)			(NIS)	
1995	21.7	44.5	11588	105.38	1221169	43.2	236735	22.0	56.5	14916	246	3666398	43.0	549616	4887566	786350
1996	23.5	42.2	11900	104.08	1238617	44.0	238140	22.6	48.6	13180	263	3471617	43.5	595797	4710235	833937
1997	24.0	43.6	12557	115.83	1454467	43.0	258998	23.0	51.7	14269	282	4028752	43.0	631310	5483218	890308
1998	24.0	47.5	13680	125.22	1712941	43.0	279981	23.0	57.6	15898	304	4827259	45.0	710534	6540200	990515
1999	24.0	51.4	14803	142.54	2110019	43.0	318715	23.5	66.2	18668	311	5796725	44.6	720135	7906743	1038850
2000	24.3	53.1	15484	142.20	2201757	43.2	319429	23.6	69.3	19626	322	6323027	43.5	728771	8524785	1048200
2001	24.6	54.6	16118	122.05	1967144	41.6	264012	23.6	68.9	19512	298	5810329	43.1	667373	7777473	931385
2002	24.1	55.1	15935	124.87	1989825	40.1	260383	22.7	70.9	19313	285	5507012	40.8	604959	7496838	865342
2003	22.6	53.4	14482	160.69	2327096	40.0	334231	23.6	71.9	20362	330	6711627	42.4	726733	9038723	1060964
2004	23.3	58.3	16301	153.14	2496286	40.6	323309	24.0	72.2	20794	354	7356422	43.0	791059	9852708	1114368
2005	24.0	62.0	17856	174.13	3109176	41.6	376667	23.6	73.1	20702	373	7721050	42.5	824248	10830226	1200915
2006	24.0	69.0	19872	168.66	3351651	41.2	361341	23.1	76.6	21234	413	8759464	42.2	905256	12111115	1266597
2007	23.3	65.1	18202	201.00	3658594	39.9	417035	22.2	77.2	20566	428	8799711	41.6	925579	12458305	1342614
2008	24.7	60.9	18051	177.82	3209822	40.8	377267	22.3	81.7	21863	422	9219506	42.2	925370	12429328	1302637
2009	23.6	62.7	17757	189.00	3356005	39.4	387223	22.4	85.9	23090	455	10516743	42.5	1006586	13872748	1393810
2010	23.4	58.1	16314	193.00	3148695	38.8	389397	22.2	85.8	22857	473	10805886	43.3	1064462	13954581	1453859
2011	23.4	61.5	17310	243.00	4206289	37.9	479115	22.4	85.0	22820	511	11657209	43.1	1145690	15863499	1624805
2012	23.6	64.3	18210	255.74	4657037	37.1	493381	22.2	87.1	23203	519	12046762	43.3	1168986	16703799	1662367
2013	23.7	63.1	17946	266.73	4786694	37.3	517355	22.4	89.0	23923	519	12410615	43.4	1170758	17197309	1688113
2014	23.9	63.9	18303	248.81	4554181	37.7	487147	22.5	90.9	24553	560	13759593	44.1	1285990	18313774	1773137
2015	22.9	61.9	16980	277.72	4715610	37.1	536266	22.4	94.1	25351	572	14507380	43.9	1307374	19222990	1843641
2016	22.7	61.6	16794	289.71	4865424	38.3	576836	22.8	98.1	26800	573	15356383	44.3	1318748	20221807	1895584

Source: PCBS (minor errors are due to rounding).

Table A2: Real Wages per hour in Gaza, West Bank and Palestine

Year	WAGE PER HOUR			GDP DEFLATOR			REAL WAGE PER HOUR			REAL WAGE PER HOUR		
	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE
		NIS	(w/o Israel & settlement)	(1995 = 100)					(w/o Israel & settlement)	Normalised by dividing through 1995 values and multiplying with 100 (1995=100)		
1995	5.16	6.67	6.22	100.00	100.00	100.00	0.05158	0.06671	0.06216	100.00	100.00	100.00
1996	5.20	5.83	5.65	110.53	110.54	110.53	0.04706	0.05271	0.05110	91.23	79.02	82.21
1997	5.62	6.38	6.16	116.53	116.61	116.58	0.04819	0.05472	0.05283	93.42	82.03	85.00
1998	6.12	6.79	6.60	118.56	117.95	118.14	0.05160	0.05760	0.05589	100.03	86.35	89.92
1999	6.62	8.05	7.61	125.95	125.93	125.88	0.05256	0.06392	0.06046	101.90	95.82	97.28
2000	6.89	8.68	8.13	141.50	134.33	136.35	0.04871	0.06459	0.05965	94.43	96.82	95.96
2001	7.45	8.71	8.35	147.50	141.60	143.40	0.05051	0.06148	0.05823	97.93	92.17	93.69
2002	7.64	9.10	8.66	164.45	163.81	163.99	0.04647	0.05557	0.05283	90.08	83.30	84.99
2003	6.96	9.24	8.52	152.62	154.41	153.79	0.04562	0.05981	0.05540	88.44	89.66	89.13
2004	7.72	9.30	8.84	148.42	150.30	149.65	0.05202	0.06187	0.05908	100.85	92.75	95.06
2005	8.25	9.37	9.02	149.35	151.79	150.92	0.05527	0.06171	0.05976	107.15	92.51	96.14
2006	9.28	9.68	9.56	154.96	160.34	158.55	0.05986	0.06035	0.06031	116.04	90.47	97.03
2007	8.77	9.51	9.28	149.32	156.08	154.03	0.05875	0.06091	0.06024	113.90	91.31	96.92
2008	8.51	9.96	9.54	141.10	156.97	152.88	0.06030	0.06347	0.06241	116.90	95.15	100.41
2009	8.67	10.45	9.95	167.06	168.65	168.04	0.05188	0.06195	0.05923	100.57	92.87	95.29
2010	8.09	10.15	9.60	186.64	180.21	181.59	0.04332	0.05633	0.05286	83.99	84.45	85.04
2011	8.78	10.17	9.76	169.33	186.07	181.50	0.05185	0.05468	0.05379	100.51	81.97	86.55
2012	9.44	10.31	10.05	179.47	205.21	198.23	0.05259	0.05022	0.05069	101.96	75.28	81.55
2013	9.25	10.60	10.19	183.50	207.72	200.95	0.05042	0.05103	0.05070	97.74	76.50	81.56
2014	9.35	10.70	10.33	201.61	204.14	203.26	0.04637	0.05241	0.05082	89.89	78.57	81.76
2015	8.79	11.10	10.43	222.00	210.06	212.60	0.03961	0.05283	0.04904	76.79	79.19	78.91
2016	8.43	11.64	10.67	223.14	209.91	212.76	0.03780	0.05547	0.05014	73.28	83.16	80.67

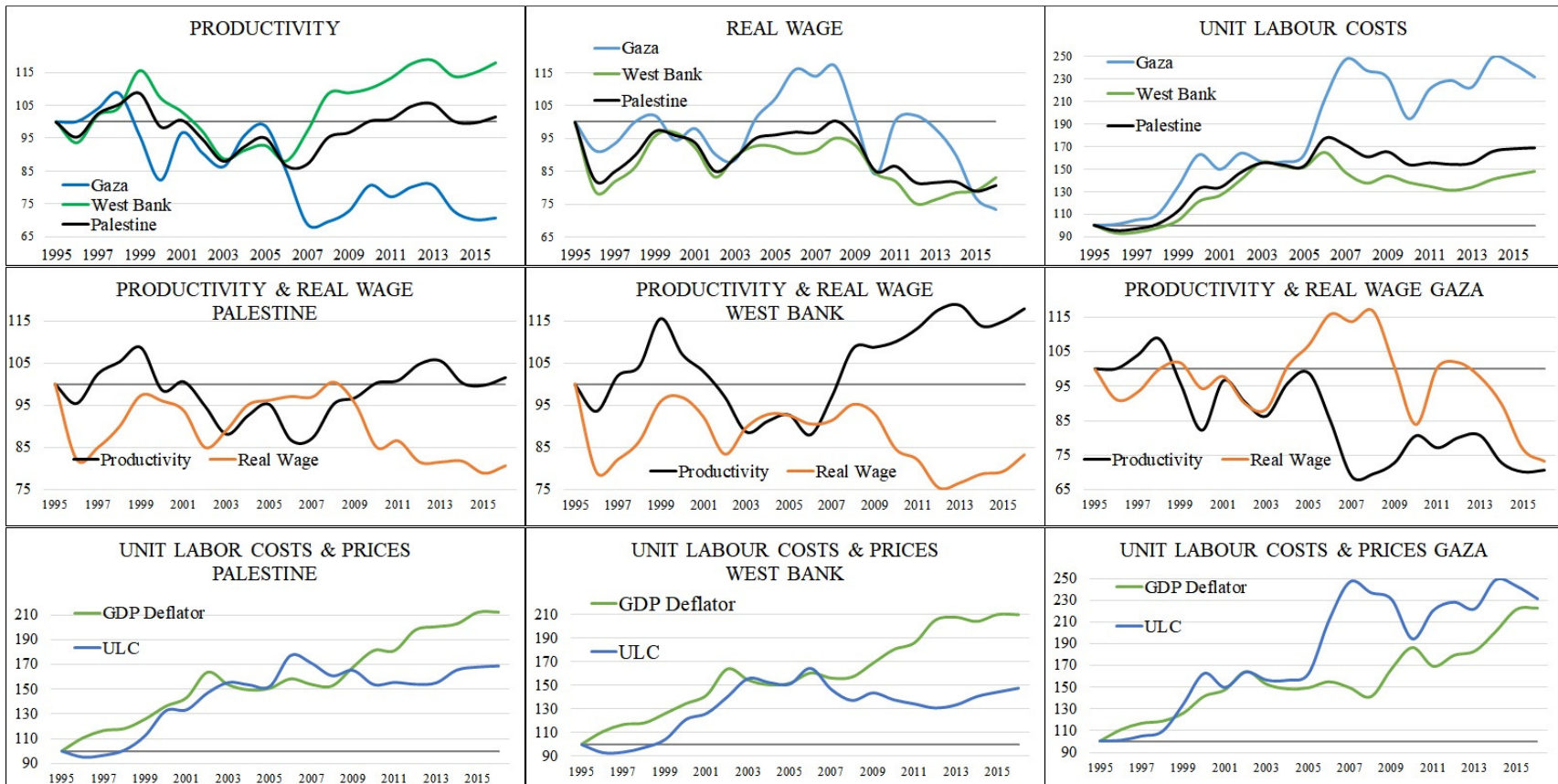
Source: PCBS (minor errors are due to rounding).

Table A3: Productivity and unit labour costs in Gaza, West Bank and Palestine

Year	REAL GDP			PRODUCTIVITY			PRODUCTIVITY			UNIT LABOUR COSTS			UNIT LABOUR COSTS		
	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE	GAZA	WB	PALESTINE
	index			Real GDP divided through hours worked (index)			Normalised by dividing through 1995 values and multiplying with 100 (1995=100)			Sum of wages divided by real GDP (index)			Normalised by dividing through 1995 values and multiplying with 100 (1995=100)		
1995	1972.73	3486.50	5417.71	0.00833	0.00634	0.00689	100.00	100.00	100.00	619.03	1051.60	902.15	100.00	100.00	100.00
1996	1985.52	3539.31	5483.54	0.00834	0.00594	0.00658	100.05	93.65	95.44	623.83	980.87	858.98	100.78	93.27	95.21
1997	2244.79	4088.28	6287.82	0.00867	0.00648	0.00706	104.01	102.09	102.51	647.93	985.44	872.04	104.67	93.71	96.66
1998	2536.04	4702.83	7189.13	0.00906	0.00662	0.00726	108.70	104.34	105.35	675.44	1026.46	909.73	109.11	97.61	100.84
1999	2540.19	5284.58	7784.42	0.00797	0.00734	0.00749	95.64	115.68	108.76	830.65	1096.91	1015.71	134.19	104.31	112.59
2000	2188.10	4958.34	7118.37	0.00685	0.00680	0.00679	82.20	107.25	98.57	1006.24	1275.23	1197.57	162.55	121.27	132.75
2001	2124.32	4365.92	6455.61	0.00805	0.00654	0.00693	96.56	103.13	100.60	926.01	1330.84	1204.76	149.59	126.55	133.54
2002	1961.49	3724.89	5649.35	0.00753	0.00616	0.00653	90.40	97.06	94.76	1014.44	1478.44	1327.03	163.88	140.59	147.10
2003	2403.64	4090.71	6441.16	0.00719	0.00563	0.00607	86.30	88.73	88.12	968.16	1640.70	1403.28	156.40	156.02	155.55
2004	2580.98	4580.40	7107.37	0.00798	0.00579	0.00638	95.80	91.28	92.57	967.18	1606.06	1386.27	156.24	152.73	153.66
2005	3099.01	4851.42	7874.88	0.00823	0.00589	0.00656	98.73	92.79	95.18	1003.28	1591.50	1375.29	162.07	151.34	152.45
2006	2556.27	5056.37	7567.71	0.00707	0.00559	0.00597	84.90	88.05	86.72	1311.15	1732.36	1600.37	211.81	164.74	177.40
2007	2391.37	5701.12	8066.47	0.00573	0.00616	0.00601	68.81	97.10	87.20	1529.92	1543.51	1544.46	247.15	146.78	171.20
2008	2186.20	6375.26	8556.86	0.00579	0.00689	0.00657	69.54	108.61	95.34	1468.22	1446.14	1452.56	237.18	137.52	161.01
2009	2349.02	6952.33	9298.10	0.00607	0.00691	0.00667	72.80	108.88	96.83	1428.68	1512.69	1492.00	230.80	143.85	165.38
2010	2615.73	7443.96	10051.16	0.00672	0.00699	0.00691	80.61	110.24	100.34	1203.76	1451.63	1388.36	194.46	138.04	153.89
2011	3078.62	8238.91	11298.87	0.00643	0.00719	0.00695	77.11	113.36	100.93	1366.29	1414.90	1403.99	220.72	134.55	155.63
2012	3294.16	8736.04	12008.92	0.00668	0.00747	0.00722	80.12	117.81	104.85	1413.73	1378.97	1390.95	228.38	131.13	154.18
2013	3478.93	8825.35	12275.21	0.00672	0.00754	0.00727	80.70	118.83	105.54	1375.91	1406.25	1400.98	222.27	133.72	155.29
2014	2954.16	9293.73	12252.88	0.00606	0.00723	0.00691	72.77	113.93	100.30	1541.61	1480.52	1494.65	249.04	140.79	165.68
2015	3134.10	9538.90	12673.00	0.00584	0.00730	0.00687	70.13	115.02	99.77	1504.61	1520.87	1516.85	243.06	144.62	168.14
2016	3395.60	9874.10	13269.70	0.00589	0.00749	0.00700	70.64	118.03	101.61	1432.86	1555.22	1523.91	231.47	147.89	168.92

Source: PCBS (minor errors are due to rounding).

Figure A1: Productivity, real wages and unit labour costs in Gaza strip, West Bank, and Palestine

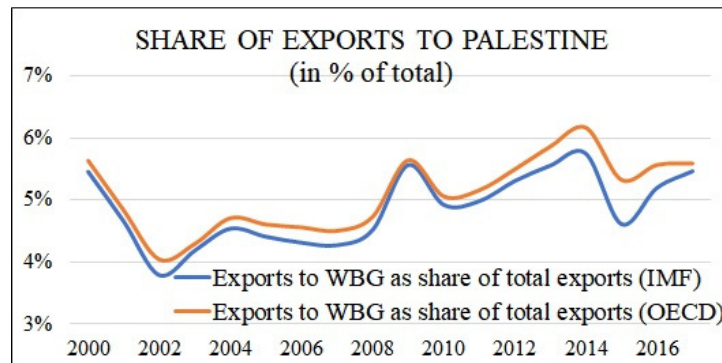


Source: PCBS.

Appendix B: Israeli Exports to Palestine

This data was derived from IMF Direction of Trade Statistics (DOTS) for goods only. As Israel did not provide any data about its exports to Palestine, we took the corresponding Israeli figures from West Bank and Gaza file. Israeli exports, in this regard, included Cost, Insurance and Freight (CIF), whereas exports were indicated as Free on Board (FOB). Thus, export figures may be slightly skewed vis-à-vis the numbers for imports.

Nonetheless, these were the best available indicators we had, and we calculated this number as a share of total Israeli exports once with IMF, and then with OECD data.



Given that the data are very similar to that reported by World Bank (2017a), we regard it as sufficient to obtain a crude estimate of the value of Palestine as an export market for Israel.