



PALESTINE MONETARY AUTHORITY

PALESTINE MONETARY AUTHORITY (PMA)



Inflation Report

2016: Third Quarter

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Executive Summary

During 2016Q3, consumer prices in Palestine relatively stabilized on annual basis, resulting in an inflation of nearby 0.04 percent. This stability came as a result of minor increases in prices in the West Bank, and a slight decline in Gaza Strip. Consumer prices continued to be affected by the pervious decline in global commodity prices, particularly for oil and food, which are considered key inflation determinants. However, inflation in Palestine was much lower than that registered in the MENA region, but exceeded that in Jordan and Israel. In general, inflation in Palestine is largely imported and highly sensitive to world prices, particularly for food and fuel.

The approach followed in this report for inflation analysis and forecasting purposes depends on two key variables: (i) cost of imports, which reflects the inflation and exchange rates of Palestine's main trading partners, among which Israel accounts for the highest portion (80 percent of exports and 70 percent of imports on average), and (ii) world food prices, as food has the highest weight (35 percent) in Palestine's consumer price index.

Inflation forecasts show that consumer prices in Palestine are expected to grow by around 0.17 percent during 2016Q4. Accordingly, the inflation rate for 2016 as a whole is expected to decline to 0.15 percent, compared with 1.4 percent in 2015. Forecasts depend on assumptions regarding the most likely future paths for (i) Palestine's most important trading partners' prices and exchange rates, (ii) prices in the international food markets, as predicted by the IMF and by foreign central banks, and (iii) domestic and seasonal factors.

Given that Palestine's inflation may deviate from the baseline scenario due to deviations in foreign prices and exchange rates, the forecast is supplemented with a risk analysis. Beside the baseline, the forecast considers four alternative scenarios based on positive and negative one-standard deviation shock in Palestine's cost of imports and in world food prices. The expected effects on Palestine's alternative inflation outcomes indicate that a positive one-standard deviation shock in external conditions would increase Palestine's prices from 0.15 percent under the baseline scenario to an average of 0.28

percent during 2016. On the other hand, a negative one-standard deviation shock would bring down inflation in Palestine from 0.15 percent to a slight inflation (0.01 percent).

Financial developments indicate that the average lending rates on the three currencies circulating in Palestine (JD, NIS and USD) have declined in 2016Q2 compared to the previous quarter. On the other hand, average deposit rates on the USD and the NIS increased, while the rate declined on the JD. The margin between lending and deposit rates in Palestine remained noticeably higher than for its counterparts in the currency-issuing countries. The margin was about 5.9 percentage points on the USD, 5.7 percentage points on the JD, and 7.9 percentage points on the NIS.

The Palestinian stock exchange rebounded during 2016Q3, following the semi-annual financial disclosures that revealed an 18 percent growth in listed companies' profits. As a result, Al-Quds index grew by 2.9 percent, reaching 518.6 points at the quarter-end. The index growth is a result of improvement in the indices of all sectors, including: manufacturing, insurance, investment, banking, and services.

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I. Recent Economic Developments

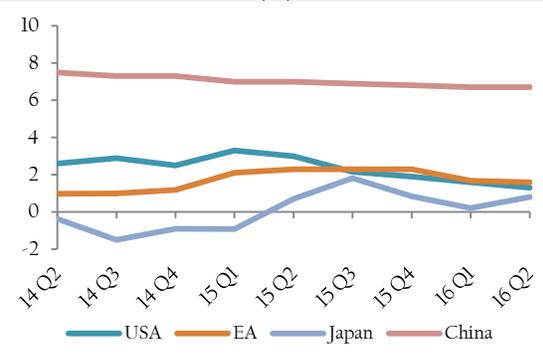
Real GDP

During 2016Q2, conflicting signs emerged in the developments of global economic performance. On the one hand, the United States and Euro Area remained under the spotlight, as fragile growth and prospects of lingering slowdown continued to cause concerns. These concerns were amplified as the "Brexit" vote surprised observers at the end of the quarter; the outlook remained ambiguous to markets and decision-makers alike. On the other hand, performance surpassed expectations in several other developed economies, as was the case in Japan, reviving hopes of more stable growth patterns in the future.

However, uneven growth distribution among country groups persisted during 2016Q2, as data showed higher growth rates in emerging and developing economies, while fragility prevailed in advanced economies. In the meantime, oil prices recovered during the second quarter after a long chain of declines. This has in turn cut part of the losses incurred by oil exporters but brought back part of the financial burden for importers. Despite the worrying signs, IMF global growth expectations remained unchanged in the medium-term¹; the world economy is expected to grow by 3.1 percent in 2016 and by 3.4 percent in 2017.

A closer look at the world's major economies reveals a slight deceleration in activity in the U.S. on the backdrop of falling private investment and exports, coupled with slowing public spending. The slowdown came despite relatively strong private consumption. Nonetheless, the labor market managed to escape the negative repercussions of this temporary setback, as unemployment continued to decline during the quarter. Eventually, U.S. growth receded to 1.3 percent during 2016Q2, as compared to 1.6 percent

Figure 1: Real growth rates in some main economies (%)



Source: Different Sources²

¹ International Monetary Fund, World Economic Outlook. October, 2016.

² IFS database and website: <http://www.tradingeconomics.com>.

in 2016Q1, suppressing IMF forecasts for 2016 by 0.6 basis points (to 1.6 percent), and for 2017 by 0.3 basis points (to 2.2 percent).

Similarly, the Euro Area performance lacked luster as various expenditure components lost momentum in several member countries. The slowdown was particularly felt in the EA's major economies, which continued to struggle with waning global demand for their exports. The upshot was a slight decline in EA growth to 1.6 percent, compared to 1.7 percent in the previous quarter. Yet, IMF forecasts remained optimistic; the Fund upgraded 2016 and 2017 forecasts by 10 basis points to 1.7 and 1.5 percent, respectively. Signs of relative recovery appeared in Japan, as real GDP grew by 0.8 percent during the second quarter compared to 0.2 percent in the previous quarter, reflecting improvement in most expenditure components, public and private. As a result, the IMF upgraded 2016 forecasts by 20 basis points to 0.5 percent, while reversing trend expectations for 2017 from a 0.1 percent contraction to a positive growth of 0.6 percent.

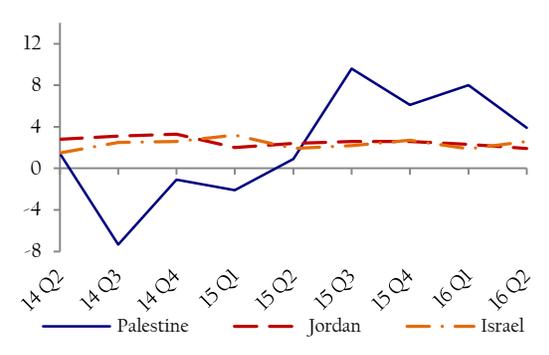
Concurrently, growth rates stabilized in China, amounting to 6.7 percent for the second consecutive quarter, and hinting at a temporary halt in the years-long slowdown. The current growth rate is in line with market expectations and falls within the Chinese government's target range of 6.5-6.7 percent. However, the persistent weakness in industrial production and global demand for Chinese exports continue to undermine future expectations. The IMF preserved its predictions for China's growth in the medium-term, with expectations of 6.6 percent in 2016 and 6.2 percent in 2017.

In the meantime, the political and economic turmoil lingered within the MENA region, limiting its capacity to achieve adequate growth levels, particularly in countries like Iraq, Syria, Egypt, Libya and Yemen. Yet, growth forecasts for the troubled region appeared more promising. The IMF upgraded its 2016 forecasts for the region from 2.9 to 3.4 percent. It also expects slightly better growth in 2017 (from 3.3 to 3.4 percent). It is worth noting that growth remains susceptible to high fluctuations in light of political uncertainty and economic instability under the historically-volatile regional conditions. Regionally, the Israeli economy regained traction during 2016Q2, growing by 2.6 percent compared to 1.9 percent in the previous quarter. Contributing to this acceleration were the notable recovery in investment and consumption (public and private), in addition to

a slight improvement in exports. In this context, IMF forecasts for Israeli growth remained stable at 2.8 percent in 2016 and 3.0 percent in 2017.

In contrast, slowdown continued in Jordan as growth amounted to 1.9 percent in the second quarter, compared to 2.3 percent in the previous quarter, owing to sluggish construction, manufacturing and transportation activities, in addition to deceleration in several types of services. Thus, IMF latest forecasts downgraded expected growth from 3.2 to 2.8 percent in 2016, and from 3.7 percent to 3.3 percent in 2017.

Figure 2: Real growth rates in Palestine, Jordan, and Israel (%)



Source: PCBS, CBS, and the Central Bank of Jordan.

Domestically, real GDP growth resumed its slowdown in 2016Q2, following a short-lived recovery in the previous quarter. Growth reached 3.9 percent, as opposed to 8.0 percent in previous quarter, on the backdrop of a similar slowdown in the WB (3.3 percent compared to 4.2 percent) and a significant drop in GS growth rates from two-digit levels in previous quarters (5.8 percent compared to 21.1 percent).

In terms of economic activities growth rates, data point to construction as the main inhibitor of growth in the quarter. Value added by construction declined by 8.8 percent as a result of falling activity in both the WB and GS, particularly as Israeli authorities re-introduced restrictions on the flow of building materials to Gaza. This is in addition to considerable declines in agriculture, trade and communication activities, by 15.6 percent, 1.6 percent and 1.2 percent, respectively. In contrast, manufacturing, insurance and financial services, and services grew by 5.6 percent, 13.6 percent and 7.5 percent, respectively, supported by rising activity in both geographic regions. However, the 11.4 percent growth in transportation and storage came solely from the WB, as opposed to a notable decline in GS.

Aggregate demand

Palestine's Gross Domestic Product grew during 2016Q2, reaching USD 2,035.2 million in 2004 prices, registering an increase on both annual and quarterly bases. This growth was mainly supported by higher consumption, both private and public.

Private consumption³ proved to be the main engine for WB growth as it picked up by 10.8 percent. Albeit at a smaller rate, public consumption also rose by 0.1 percent, supported by increase in most spending items of central government.

Conversely, WB investment declined by 6.9 percent in light of a drop in investment in building, accompanied by lower inventory accumulation. On the other hand, trade indicators weakened, as exports declined by 6.2 percent, while imports grew by 3.5 percent. This widened the trade deficit by 10.7 percent to reach USD 661.3 million (in 2004 prices), equivalent to 42.6 percent of WB's GDP.

In GS, private consumption remained weak and grew slightly by 1.3 percent, while public consumption marginally declined by 0.1 percent. Also, investment in building receded, reducing the value of total GS's investment. However, accumulation of inventory added to the total investment which grew to around USD 12.7 million. Simultaneously, trade witnessed mixed trends; exports picked up by 6.9 percent, but imports grew by only 2.3 percent, and hence widening the trade deficit by 1.8 percent, up to USD 155.6 million (equivalent to 32.1 percent of Gazan GDP).

Table 1: Aggregate demand at constant prices (2004=100)

	2015			2016	
	Q2	Q3	Q4	Q1	Q2
Private consumption	1,746.3	1,665.7	1,776.2	1,814.9	1,881.0
Government expenditure	535.6	524.6	556.5	474.4	537.4
Investment	457.6	386.2	491.5	429.7	445.3
Exports	456.7	387.5	418.1	379.6	385.0
Imports	1,206.8	1,262.1	1,236.7	1,116.5	1,247.0
GDP ⁴	1,959.3	1,921.9	1,988.5	2,000.5	2,035.2

Source: PCBS.

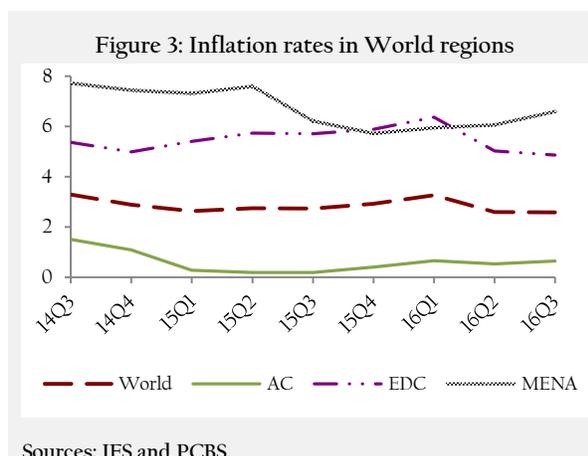
Inflation

Global inflation rates have been declining for two years in light of weak growth rates and plummeting commodity prices, particularly oil. During 2016Q3, inflation rates in various countries either remained at low levels or declined, preserving rates well below targeted levels. Accordingly, global inflation stood at the historically-low level of 2.6 percent (see Figure 3).

³ The private consumption includes; household consumption and the consumption of non-profit institutions serving households 'NPISH'.

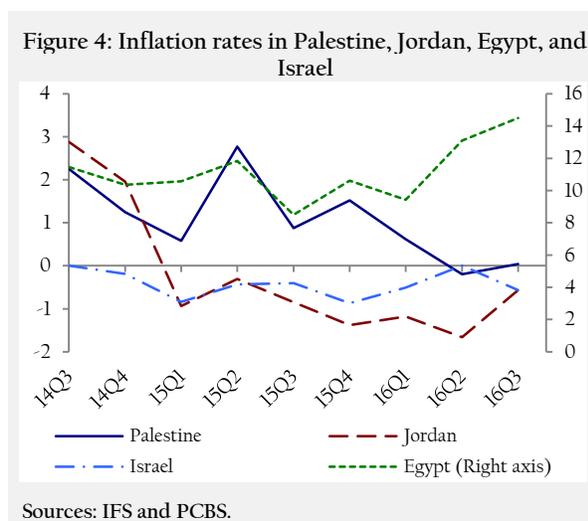
⁴ The difference between the sum of former items and the GDP is the net errors and omissions.

Similarly, advanced economies continued to register very low inflation rates due to weak private demand. Although inflation rose during the third quarter, the increase was marginal, and hence, inflation rates stayed way below the target. In the US, for example, inflation slightly increased by 7 basis points, reaching 1.12 percent. Also, prices marginally grew in the Euro Area, reflecting growth in non-commodity prices, yet failing to exceed 0.3 percent. Meanwhile, preliminary data point to a deflation in Japan due to sluggish private demand. In sum, advanced economies registered an inflation of 0.64 percent, an increase of 11 basis points from the previous quarter.



On the other hand, inflation in emerging and developing countries exceeded that in the advanced ones during 2016Q3. Yet, the recent significant declines in the EDCs narrowed this inflation gap, as inflation in the EDCs declined further by 16 basis points reaching 4.6 percent. In China, for example, inflation declined further below the target, to 1.7 percent compared to 2.1 percent in the previous quarter. It is worth noting that most countries in the MENA region experienced a drop in inflation owing to sliding prices of imported commodities. However, the remarkable price increase in Egypt and Iran pushed inflation in the whole region to increase during 2016Q3⁵.

Regionally, deflation persisted in both Jordan and Israel, albeit slowing down during the third quarter, reaching -0.57 percent in both countries, compared to -1.7 percent in the former and -0.84 percent for the latter, during 2016Q2. Conversely, inflation in Egypt (already above region's average), increased furthermore during third quarter to 14.5 percent, scoring the highest rate in the MENA region. Many reasons stand behind this pick up, mainly the VAT



⁵ Inflation figures are not available for the MENA in 2016Q3, but preliminary figures indicate an increase in inflation from 6.1 percent to around 6.6 percent.

hike, and the rising cost of imports as the Egyptian pound deteriorated against main currencies.

Locally, consumer prices relatively stabilized compared to the corresponding quarter, registering an inflation of only 0.04 percent, due to a slight price increase in the WB accompanied by a deflation in GS.

Global and local prices

This section deals mainly with developments in local and global markets' commodity prices, the most important determinant of inflation trends. Commodity prices experienced a downward trend since the second half of 2014, particularly the world oil prices (WOP). During 2016Q3, WOP dropped on annual basis by 8.4 percent, and marginally by 0.2 percent compared to the previous quarter. This

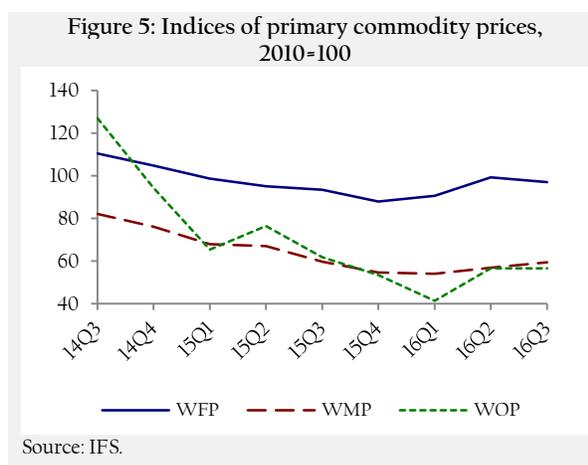
decline was driven by less-than-expected demand, along with maintaining the same production level by OPEC countries despite their accumulated inventories. As a result, crude oil prices declined to USD 44.8 per barrel.

Likewise, world metal prices (WMP) marginally declined from the corresponding period by 0.6 percent, but grew compared to the previous quarter by 4.5 percent. However, WMP are still at low levels due to weak economic growth in main economies, and hence sluggish demand on metals, particularly from China, which consumes roughly half of the global metals production.

Meanwhile, world food prices (WFP) picked up by 3.8 percent after a considerable decline in the last quarter; however it is still lower than the average of the last 4 years. The recent surge is attributed to a significant increase in sugar prices, beside a moderate rise in prices of milk, meat, and edible oil.

Locally, prices witnessed slight changes during 2016Q3, particularly when comparing to the corresponding quarter. In general, price trends are not consistent between the WB and GS depending on variant price determinants. However, these differences narrowed down during this quarter.

With the exception of a slight decline in transportation, prices of most commodity categories have increased compared to previous quarter in the WB, led by a 4.3 percent growth in food



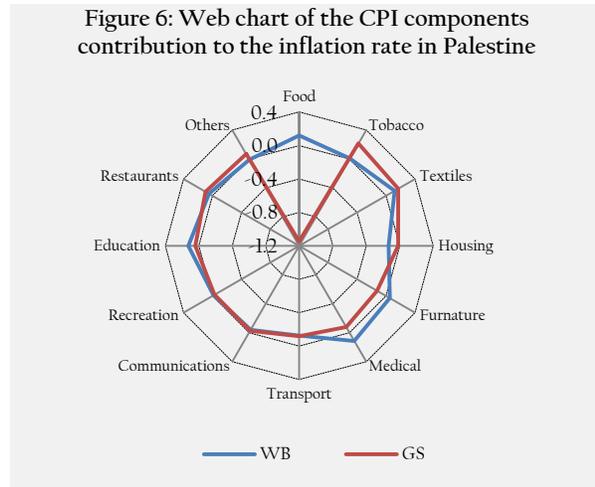
prices. As a result, the consumer price index grew by 1.6 percent. On annual basis, the consumer price index witnessed a meager inflation of 0.4 percent, with high variations in prices of sub-categories. On one side, the education price index picked up by 3.2 percent, followed by an increase in indices of medical services and restaurant services, by 2.5 percent and 2.2 percent, respectively. Likewise, textile and furniture price indices increased by 1.9 percent and 1.1 percent, respectively. Meanwhile, the increase in the food price index was marginal (0.4 percent). Given that a significant portion of some of these commodities is imported, the slight increases previously discussed could partially be attributed to the increase in the value of the NIS against the USD, which in turn reduced imports cost.

The exchange rate variation also led to declines in other commodities, mainly those related or affected by oil prices. For example, the price indices of housing services and transportation declined by 1.5 percent and 0.9 percent, respectively. It is worth mentioning that housing prices are on a downward trend that began two years ago, partially affected by the previous decline in oil prices, in addition to the oversupply of housing units. Also, the communications price index declined marginally (1.3 percent) in view of the Ministry of Telecommunications adopted strategy to lower prices. Prices of cultural and miscellaneous goods also fell, by 0.8 and 0.1 percent, respectively.

Meanwhile in GS, consumer prices witnessed a drop by 1.4 percent on quarterly basis as the price indices of most categories declined. In general, most of those declines were slight, except for two categories: alcohol and tobacco and food, whose indices remarkably dropped, by 8.8 percent and 2.6 percent, respectively. It is worth to note that the hyper fluctuations of tobacco prices reflect weak control over tobacco traders, and the continued adverse price effect of the Israeli blockade on GS.

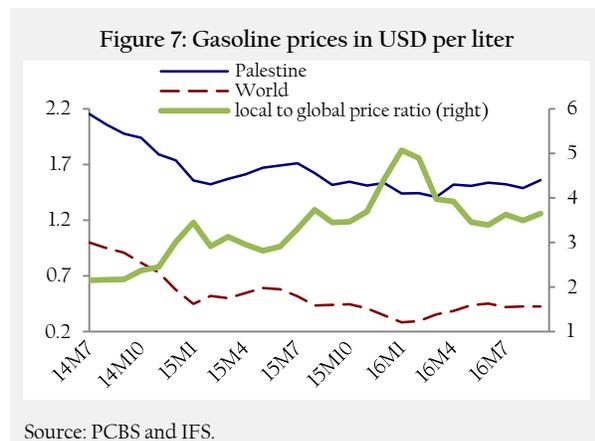
On Annual basis, price movements were almost similar to those on quarterly basis, as the consumer price index declined by 1.0 percent due to deteriorating prices of certain sub-categories; the food index dropped by 2.8 percent, and transportation and housing indices declined by 1.3 percent and 0.2 percent, respectively. Additionally, commodities with low weights have declined; for instance medical services, furniture, cultural goods and communication fell by 2.6 percent, 2.1 percent, 1.3 percent and 0.9 percent, respectively. In contrast, other commodities' indices increased y-o-y; thus alcohol and tobacco, and textile by 7.2 percent and 2.8 percent, respectively. Moreover, the rise in indices of restaurant services, education and miscellaneous goods were 5.5 percent, 1.2 percent and 0.5 percent, respectively.

Overall, the decline in food prices contributed negatively (by -1.2 percentage point) to inflation in GS during 2016Q3, (see Figure 6). On the other hand, the contributions of price categories in the WB were minimal, ranging between -0.1 percentage point and 0.1 percentage point.



Regardless of different price determinants in the WB and GS, commodity prices in Palestine exceeded those in the world market, mainly because the previous falls in global prices were not reflected completely or immediately in local prices. Hence overall, local prices during 2016Q3 either grew, or fell by less than in global markets, resulting in a widening price gap over time.

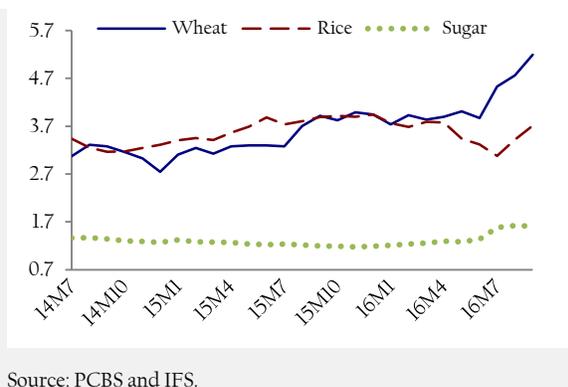
The decline in global prices of gasoline, a vital commodity for Palestinians, slowed during the third quarter to reach 0.2 percent. However, local gasoline prices grew by 0.2 percent. Consequently, gasoline prices in Palestine have stabilized at 3.6 times their level in the global market (see Figure 7).



It is noteworthy that the USD exchange rate against the NIS declined during the quarter, which partially mitigated the increase in local prices. But in general, the USD exchange rate against the NIS remained high, limiting the possible benefits for local consumers. During 2016Q3, a liter of gasoline was about USD 1.5 (around NIS 5.8) in the local market, compared with USD 0.4 in the global market.

Figure 8: Local prices to global prices

As in the case of fuel, other commodities local prices, like those for wheat, rice, and sugar stayed much higher than in world markets. Several factors stood behind these discrepancies, including: taxes imposed on imported products, the high cost of transportation and storage, and oligopolistic pricing.



Source: PCBS and IFS.

During 2016Q3, the price gap widened as the decline in global price did not match that in the local market (see Figure 8). As a result, both rice and wheat prices in the local market were 4.8 and 3.9 times their price in global markets, while local prices of sugar became around 1.6 times global prices.

Also interesting are prices for some non-imported commodities, like fresh chicken and beef meat. Local prices of these commodities are not as sensitive to global trends but are still much higher than world prices due to their unduly high production cost. For instance, fresh chicken meat prices were around 1.5 times the world price during 2016Q3, while beef meat prices were around 3.5 times world prices. Table (2) shows price developments for some selected commodities (imported and non-imported) in the local market during the current and previous quarters.

Table 2: Prices of selected commodities in Palestine NIS per unit⁶

	2015		2016		
	Q3	Q4	Q1	Q2	Q3
Rice	136.7	135.9	134.6	134.3	134.7
Wheat	148.8	147.9	146.2	143.0	141.1
Bread	3.8	3.8	3.7	3.7	3.7
Beef meat	58.7	57.3	54.3	53.2	53.2
Chicken meat	17.2	14.9	15.2	13.7	14.5
Powder Milk (Nido)	96.4	95.7	95.9	95.9	94.4
Yogurt (local)	5.1	5.0	5.1	4.9	5.0
Chicken Eggs	13.9	14.2	13.0	11.3	13.8
Tomatoes	3.1	6.2	3.3	2.5	3.9
Sugar	132.8	128.1	126.7	130.9	147.0
Gas	57.1	56.6	57.4	57.2	58.1
Diesel	5.5	5.3	4.9	5.2	5.3
Gasoline 95	6.2	5.9	5.6	5.8	5.8

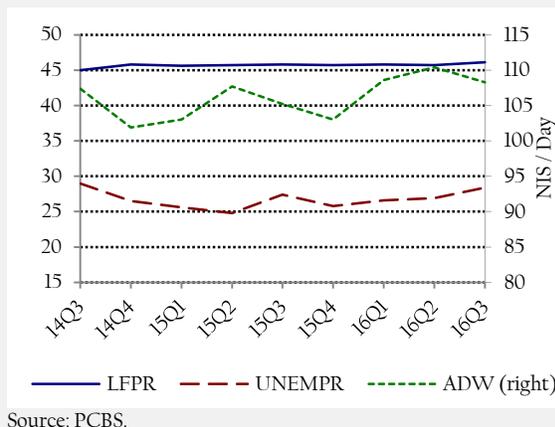
Source: PCBS

⁶ Unit for Wheat: 60 Kg sack; Bread: 1 Kg; Rice: 25 Kg sack; Chicken and Beef meet: 1 Kg, Powder Milk: 2.5 Kg can; Yogurt: 500 g can; 2 Kg box; Tomatoes: 1 Kg; Sugar: 50 Kg sack; Gas: 12 Kg cylinder, Diesel and Gasoline: 1 Liter.

Labor force and wages

Labor market data highlight two significant developments during 2016Q3; the first is an accelerated rise in new labor market entrants, increasing by 22,500 persons, and thus raising the participation rate⁷ to 46.1 percent, the highest value achieved in two years. The second development concerns unemployment rates, as the rise in new market entrants was not sufficiently matched by the growth in available jobs. Hence, the number of unemployed persons grew during the quarter by 26,200 persons, raising unemployment rates in the WB and GS by 1.4 and 1.5 percentage points, to 19.6 and 43.2 percent, respectively.

Figure 9: Labor force main indicators in Palestine



Unemployment remained rampant in Gaza, exceeding 40 percent for the second consecutive year, in light of recent Israeli war and ongoing siege imposed on the Strip. In contrast, the absorption of large numbers of WB workers by the Israeli labor market mitigated unemployment in the WB. Workers in Israel and the Settlements reached 112,000 during 2016Q3, or 20 percent of total WB laborers. Meanwhile, the Israeli labor market remains inaccessible to GS workers for years⁸. And although the Israeli authorities intermittently allowed for no more than 100 GS laborers to enter their market, they soon re-imposed a full ban.

Palestinian labor in the Israeli market remains of considerable significance due to its substantial influence on wages and prices in Palestine, given the sizeable wage differential between the two labor markets. This gap adds pressure on local wages to rise, while simultaneously spurring demand for goods and services. However, since the majority of these goods and services are imported, domestic prices eventually face undesirable inflationary pressures.

During 2016Q3, local wages in the WB and GS continued to decline compared to the previous quarter in light of rising labor supply and the growing number of unemployed persons, as previously discussed. In general, wages fell in the WB and GS by 1.7 percent and 4.2 percent, respectively. A worker's average daily wage in the WB amounted to NIS 96.6, compared with NIS 59.0 for workers in GS. In contrast, a worker's average daily wage in Israel and the

⁷ The number of individuals in working age (15 years and above) in Palestine reached 2,944,900 persons during 2016Q3.

⁸ Gazan workers were banned from entering the Israeli market directly after the unilateral Israeli withdrawal from Gaza Strip in 2005.

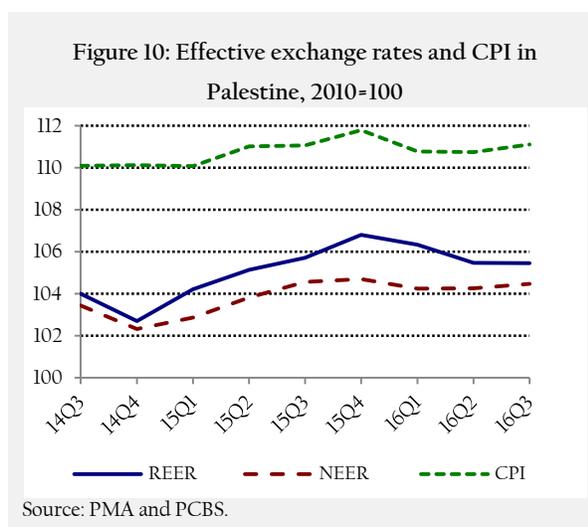
Settlements continued its rapid multiplicative rise during this quarter, reaching NIS 222, or 2.3 times the wage in the WB.

Data indicate that wages of workers in Israel and the Settlements witnessed an average of 1.5 percent quarterly rise during the past five years, compared to a 0.7 percent rise in the WB. Workers in GS, on the other hand, have seen their wages diminish by 0.1 percent, on average, each quarter for the past five years.

The reciprocal relation between prices and wages implies that when inflation exceeds the rise in the average nominal wage, the purchasing power of real wages decline, and vice versa. However, discrepancies in price trends were evident in WB and GS data during 2016Q3, leaving varying effects on wages in both regions. On a quarterly basis, an inflation of 1.6 percent in the WB further amplified the fall in nominal wages, and thus, average real wages in the WB declined by 3.3 percent during the comparison period. In contrast, prices in GS declined by 1.4 percent, mitigating some of the fall in real wages and reducing the decline to 2.8 percent. In both cases, workers paid in USD and JD saw a decline in wages owing to falling USD and JD exchange rates by 0.2 percent compared with the previous quarter.

Effective exchange rates

Figure (10) shows the nominal and real effective exchange rates (NEER and REER) in Palestine⁹. The discrepancy between the NEER and REER indicates that changes in inflation in Palestine relative to its trading partners contributed to the appreciation of the real exchange rate during this period. The appreciation of the NEER indicates that the NIS appreciated against Palestine's trading partners' currencies, while the appreciation of the REER indicates that Palestine lost competitiveness against its trading partners¹⁰.



⁹ The NEER provides a weighted average of a country's nominal bilateral exchange rates, indexed on a chosen base year; The REER corrects the NEER for relative price developments.

¹⁰ NIS is the currency used in the calculation of the CPI and thus NEER and REER.

Data show that the NEER has marginally depreciated by 0.1 percent during 2016Q3, compared with 2015Q3, which indicates that the NIS depreciated against Palestine trading partners' currencies. Likewise, the REER slightly depreciated by 0.2 during the quarter, which means that Palestine gained some competitiveness against its trading partners. It is worth mentioning that the Palestinian foreign trade is substantially affected by the Israeli-imposed restrictions and other obstacles, and these effects were much stronger than the effects of changes in NEER and REER.

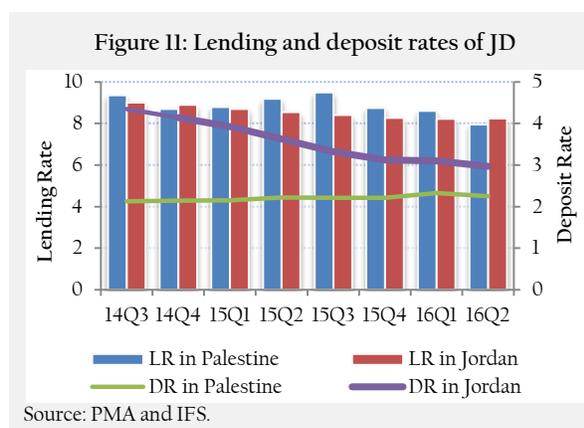
II. Recent Financial Developments

Interest Rates

Lending and deposit rates in Palestine frequently move over time according to changes in the monetary policies in the issuing countries of the currencies circulated in Palestine and also to the level of cash in the banks operating in Palestine. However, tracking these movements during previous quarters reveals that lending rates on the three currencies circulating in Palestine are higher than their counterparts in the countries of origin. On the other hand, the deposit rate on the NIS is higher than its counterpart in Israel, but is consistently lower for the JD in Palestine compared to its counterpart in Jordan.

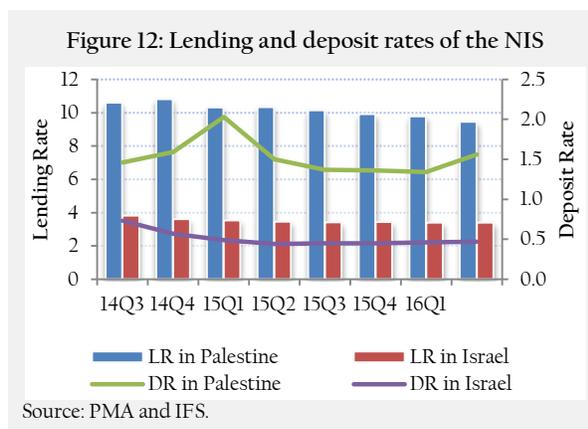
Average lending and deposit rates have witnessed various developments during the second quarter of 2016. The average lending rate on the three currencies (JD, NIS and USD) declined compared to previous quarter. On the other hand, the average deposit rate on the USD and the NIS increased, while it decreased slightly on the JD during the quarter,

The average lending rate on the JD in Palestine continued to decline during 2016Q2, falling to its lowest level in three years (from 8.61 percent to 7.98 percent). At the same time, the rate relatively stabilized in Jordan at 8.23 percent. In sum, the rate in Palestine became less than that in Jordan for the first time in two years. It is worth noting that the JD is the least circulated currency in the Palestinian market and is rarely used in daily



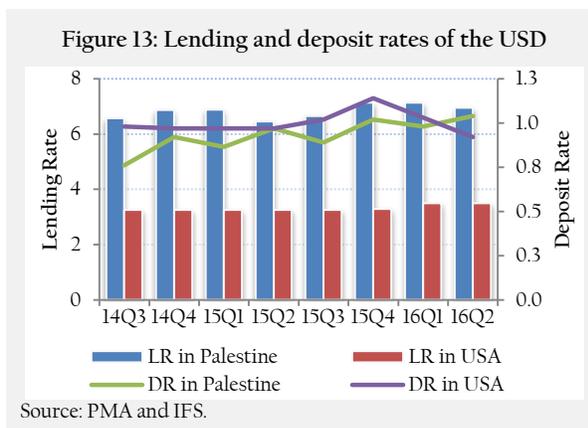
transactions. Credit share in this currency is also the lowest, at about 13.8 percent of net credit in the first half of 2016.

Similarly, the average lending rate on the NIS in Palestine has decreased further, reaching its lowest (9.45 percent), compared to the previous level of 9.79 percent. At the same time, it relatively stabilized in Israel at a low level of 3.4 percent, as the Bank of Israel maintained the unprecedented low interest rate (0.1 percent). It is worth mentioning that the lending rate on the NIS in Palestine is



invariably the highest compared to those on the other two currencies. This could be mainly attributed to the intensive use of the NIS in daily transactions and hence then increased demand for the NIS, and also to the high cost of delivering the currency to Palestinian banks. Moreover, this currency's share in extended credit is also high, at about 35.1 percent of net credit in the first half of 2016.

Likewise, the average USD lending rate in Palestine declined slightly (8 basis points), to 6.95 percent. At the same time, the rate in the U.S. stabilized at 3.5 percent. Fed maintained the official interest rate at low levels until the end of 2015, when was increased, raising the lending rate to the current level.



Movements in average deposit rates on the USD and the JD circulating in Palestine were limited during 2016Q2. The deposit rates rose slightly on the USD (6 basis points) to 1.04 percent, while it declined in the US¹¹ from 1.03 percent to 0.92 percent. Also, it declined by 8 basis points on the JD in Palestine to 2.25 percent, concurrently with a larger decline in Jordan from 3.1 percent to 2.97 percent. Conversely, the deposit rate on the NIS increased locally to its highest level within a year, scoring 1.56 percent compared to 1.34 percent in the previous quarter.

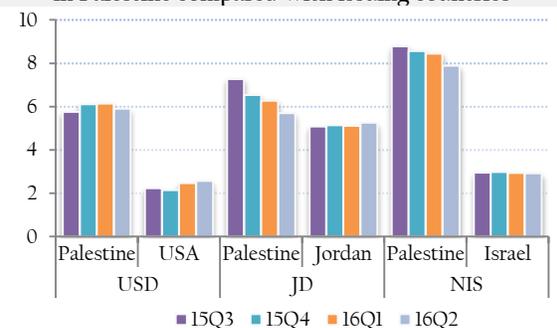
¹¹ Interest rates on government securities and government bonds in the short-term were used as a proxy for the deposit rate in the US.

However, the increase in Israel during the same quarter was insignificant, about 1 basis point to 0.47 percent.

Deposit rates are determined by several factors, including banks' liquidity and competitiveness, and most importantly, monetary policy. The low official interest rate in Israel and Jordan (expansionary monetary policy) led to lower deposit rate in those countries, and hence affected the rate in Palestine.

Consequently, the margins between the average lending and deposit rates remain remarkably higher in Palestine than in the issuing countries, but the decline in lending rates during this quarter have narrowed the gap slightly (see Figure 14). As a result, the margin on the USD in Palestine amounted to 2.3 times that in the U.S, while the margin on JD amounted to 1.1 times that in Jordan. In comparison, the margin on the NIS remained the highest; around 2.7 times the margin in Israel.

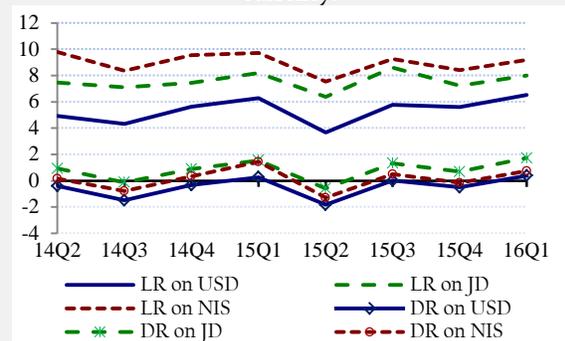
Figure 14: Margins between lending and deposit rates in Palestine compared with issuing countries



Source: PMA and IFS.

Data indicate that real deposit interest rates¹² in Palestine continued to improve during 2016Q2, in light of a deflation by 0.2 percent compared to inflation by 0.6 percent in 2016Q1. Accordingly, the average real deposit rate notably increased to 1.2 percent for the USD, 2.5 percent for the JD, and 1.8 percent for the NIS.

Figure 15: Real lending and deposit rates in Palestine by currency.



Source: PMA and PCBS.

At the same time, the deflation led to a pick-up in the average real lending rates to 7.2 percent, 8.2 percent and 9.7 percent on the USD, JD and the NIS, respectively. Figure (15) illustrates recent developments in average real interest rates during 2016Q1, including:

¹² Fisher's equation: $(1 + \text{nominal interest rate}) = (1 + \text{real interest rate}) * (1 + \text{expected inflation rate})$.

- Average real deposit rates on the currencies circulating in Palestine have improved for the three currencies compared to the previous quarter. This pick-up implies that the real value or the purchasing power of deposits in these currencies has increased.
- The average real lending rates increased for all currencies circulating in Palestine, implying that the real value of banks' credit has increased during the quarter.

Stock market

Palestine Exchange indices rebounded during 2016Q3, achieving higher recorded levels compared to the previous quarter.

The first month of the quarter witnessed a series of corrective price adjustments, following the decline incurred in previous quarter as a result of dividend payouts.

However, indices retreated by the end of

the month as a natural response to approaching semi-annual financial disclosures. Thereafter, the disclosures revealed an 18 percent growth in listed companies' profits, leading to another surge in market indices. Al-Quds index grew by 2.9 percent compared with previous quarter by end 2016Q3, reaching 518.6 points (see Table 3). The index growth is a result of improvement in all sector indices, including: manufacturing, insurance, investment, banking, and services. The increase ranged between 2.2 and 4.4 percent for these sectors.

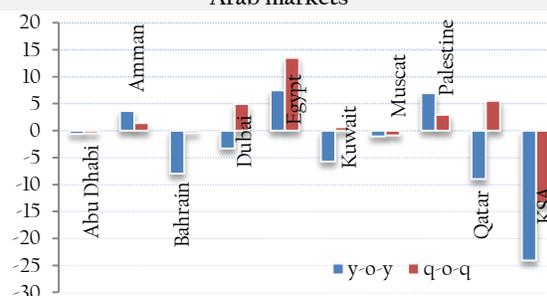
A look at a selection of Arab financial markets points to a renewed deterioration in Gulf financial markets owing to a new round of declines in oil prices. Saudi Arabia headed the list of afflicted markets with a 13.5 percent q-o-q fall in its general index. Meanwhile, markets in other gulf states showed more resilience, recording either marginal positive growth or negligible declines. Market indices of Oman, Abu Dhabi and Bahrain declined by less than

Table 3: Palestine stock exchange index (Al-Quds index)

	2015		2016		
	Q3	Q4	Q1	Q2	Q3
Banking	124.6	143.6	136.1	132.4	136.7
Industry	64.2	69.9	70.6	72.2	75.3
Insurance	45.3	49.1	54.8	60.1	62.4
Investment	22.2	24.0	23.8	25.2	26.1
Service	45.7	48.4	45.4	44.4	45.3
Al-Quds	484.7	532.7	506.3	503.8	518.6

Source: www.pex.ps

Figure 16: Stock markets performance, some selected Arab markets



Source: <http://www.gulfbase.com>, <http://www.ase.com.jo>, and <http://www.exg.com.eg>.

1.0 percent, each, compared to the previous quarter, while indices of Kuwait, Dubai and Qatar grew by 0.6, 4.9 and 5.6 percent, respectively (see Figure 16). Nonetheless, current levels of the aforementioned indices remain well below their corresponding quarter figures.

Regionally, Amman Stock Exchange index grew by 1.4 percent q-o-q and 3.7 percent y-o-y. Similarly, the Egyptian Exchange bounced by 13.5 percent q-o-q and 7.5 percent y-o-y, following a decline in the previous quarter. The surge comes amidst signs of possible IMF deal granting Egypt a three-year USD 12 billion Extended Fund Facility. However, the Egyptian exchange remains susceptible to considerable fluctuations given successive economic developments.

III. Model Based Inflation Forecast

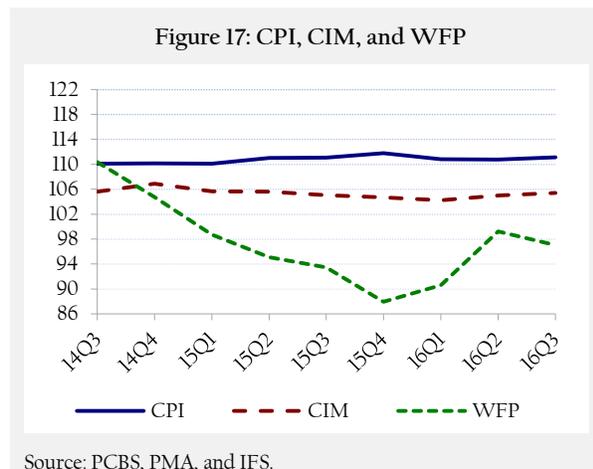
Inflation model and estimation technique

Analysis shows that the CPI in Palestine is co-integrated with (i) the CIM, which is a weighted average cost of imports, expressed in NIS, and calculated regularly by the PMA, and (ii) the world food price index. The importance of WFP reflects the large weight food occupies in the CPI basket in Palestine¹³.

Considering this relationship and the CPI, the question arises as to how this long-run

relationship is best estimated, and how to model the short-term dynamics that explain how fast shocks to the relationship are corrected over time in order to bring the CPI back to its long-run equilibrium value.

In this respect, long and short-run relationships are estimated using three different approaches. The first is the Johansen's (1991, 1995) system-based reduced rank approach. The second is the ARDL test which is based on Pesaran, Shin (1999) and Pesaran, Shin, Smith (2001). The third is the semi-parametric Fully Modified OLS (FMOLS) approach of Phillips and Hansen (1990).



¹³ For more details about inflation determinants in Palestine, see Palestine Monetary Authority (PMA), 2011. Inflation Report, April 2010.

Baseline inflation forecast

The objective of this section is to use the basic inflation model to generate a quantitative CPI outlook for the following years on a quarterly basis, i.e. for the period 2016Q4-2017Q4. To that end, a baseline scenario for the exogenous variables, CIM and WFP, is needed. The CIM is basically the denominator of the REER index calculated by the PMA. The baseline scenario for the CIM was derived from the VECM. As the consumer prices in Israel slightly declined in recent month, we assumed that CIM will witness a slight growth (0.1 percent) in 2016, and will increase by around 1.8 percent in 2017.

The most recent IMF forecasts indicate that the world food prices will increase in 2016 and 2017, but at a slower pace in the latter. Accordingly, we calculate that the world food prices will rise by around 2.3 percent in 2016 and 1.3 percent in 2017.

Inflation will be forecasted according to the above-mentioned three estimation techniques¹⁴, combined with the common baseline growth rates for the CIM, and the WFP, as explained in Table (4).

As is well known, the use of econometrically estimated models to forecast future inflation is subject to model and coefficient uncertainty. To reduce this uncertainty, we will take the simple average of the three models. Accordingly the average annual

inflation forecast for 2016Q4 will be 0.17 percent, and we expect 0.15 percent inflation in 2016 as a whole. However, we expect inflation to increase in 2017 to 1.3 percent on average (see Table 4).

	Assumptions		Inflation Forecasts			
	CIM	WFP	VECM	ARDL	FMOLS	Aveg.
16Q1*	-1.37	-8.20	0.64	0.64	0.64	0.64
16Q2*	-0.57	4.33	-0.24	-0.24	-0.24	-0.24
16Q3*	0.29	3.76	0.03	0.03	0.03	0.03
16Q4	2.21	10.41	-0.15	0.34	0.32	0.17
2016	0.13	2.32	0.07	0.19	0.19	0.15
17Q1	1.76	7.23	1.39	1.27	1.28	1.32
17Q2	1.92	-1.91	1.33	1.22	1.17	1.24
17Q3	2.27	0.35	1.28	1.48	1.40	1.38
17Q4	1.22	0.00	1.32	1.15	1.08	1.19
2017	1.79	1.30	1.33	1.28	1.23	1.28

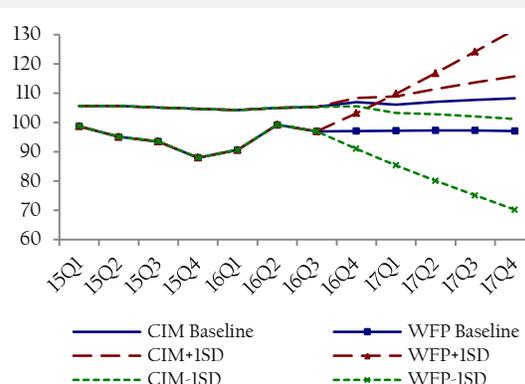
* Actual data.

¹⁴ VECM, ARDL, and the FMOLS.

IV. The Balance of Inflation Risk

Apart from the abovementioned risks of model uncertainty, the CPI outlook also crucially depends on the assumptions regarding the course of the model's exogenous variable's forecasts; these exclusively refer to external conditions reflecting foreign inflation trends, NIS bilateral exchange rates, and world market food prices.

Figure 18: Scenario assumptions for CIM and WFP



We evaluate the risks for the CPI outlook stemming from potential shocks to these external conditions by setting up four alternative scenarios, resulting from all possible combinations of positive and negative one-standard deviation shocks in the baseline growth rates of CIM and WFP.

These results demonstrate that taking a one-Standard Deviation (1SD) shock may not fully reflect the implied risk. Because of the existence of excess kurtosis¹⁵, the probability distributions are leptokurtic, implying that the occurrence of extreme shocks has a probability that is higher than one would expect on the basis of a normal distribution (see Figure 18).

The results of these scenarios are displayed in Table (5). They indicate that, given the assumptions, the different shocks

Table 5: Baseline and risk analysis of the CPI in Palestine for 2016 and 2017 (Percentage point)

Scenario	Shock	Implied annual growth rate CIM		Implied annual growth rate WFP		Implied inflation forecast	
		2016	2017	2016	2017	2016	2017
1	Baseline	0.13	1.79	2.23	1.30	0.15	1.28
2	+1SD CIM +1SD WFP	0.47	6.31	3.94	23.75	0.28	4.30
3	+1SD CIM -1SD WFP	0.47	6.31	0.69	-17.79	0.18	1.38
4	-1SD CIM +1SD WFP	-0.2	-2.58	3.94	23.75	0.11	1.07
5	-1SD CIM -1SD WFP	-0.2	-2.58	0.69	-17.79	0.01	-1.74

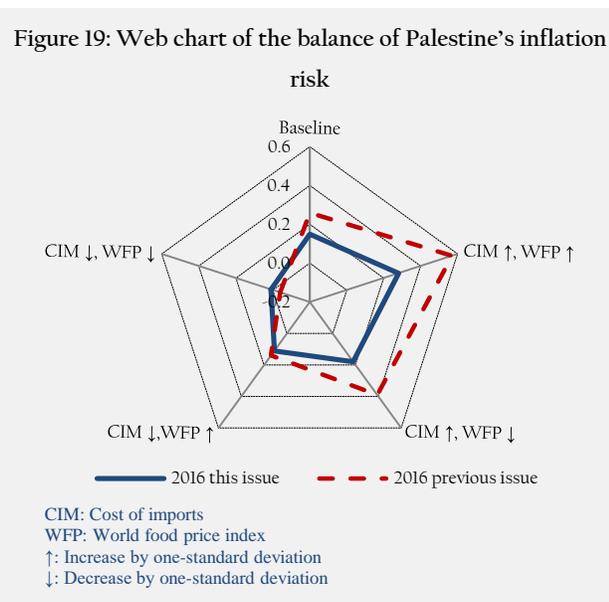
* Actual data.

are unlikely to deviate the inflation from the baseline (0.15 percent) significantly. Thus, average inflation forecasts during 2016 would range between 0.01 percent and 0.28 percent. In 2017, the

¹⁵ Kurtosis measures the peakedness or flatness of the distribution of the series.

average inflation forecasts are expected to range between 1.7 percent and 4.3 percent, with 1.3 percent as the central baseline outlook.

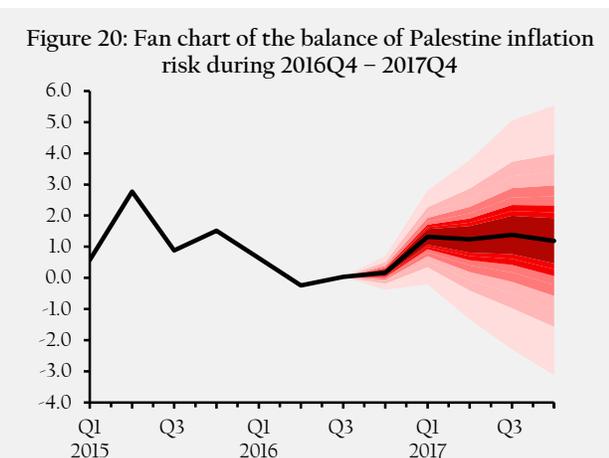
Figure (19) shows the current risk analysis of inflation in Palestine during 2016 compared with the risk analysis in 2016 predicted in the previous report. The figure indicates that scenarios 3 and 4 give results close to the baseline forecast; but scenarios 2 and 5 involve upside and downside outliers, respectively. The figure reveals that the risk declined compared with the risk predicted in the previous issue.



The upside risk to the inflation forecast is clearly related to a higher expected risk in world food prices, combined with a higher inflation in Palestine's main trading partners, compared to what is assumed in the baseline. Conversely, inflation in Palestine may turn out to be considerably lower than predicted in the baseline, in case world food prices, together with inflation in the main trading partners, turn out to be lower than expected.

Apart from model uncertainty and uncertainty related to external conditions, the inflation outlook for Palestine also hinges on potential specific shocks that may perturb the economic and political conditions in Palestine independently of shocks occurring in the rest of the world. An example of such shocks was the Israeli withholding of clearance revenues during 2015Q1, resulting in delays and/or disruptions in payment of government employees' salaries, which depresses demand and causes a fall in prices.

Figure (20) shows the fan chart of the balance of Palestine's inflation risk during 2016Q4–2017Q4. The chart contains the quarterly profile of the baseline inflation forecast mentioned above based on the inflation volatility observed during the



most recent years. It should be mentioned that the range of the potential outcomes is fairly broad, reflecting the uncertainty of the forecast which is the consequence of all risk factors mentioned above, including the country- specific ones. It should also be mentioned that the most likely outcomes for the predicted inflation are situated in the darkest shaded regions of the chart. The weaker the shading in the chart, the smaller the perceived probabilities of these potential outcomes.