PALESTINE MONETARY AUTHORITY

PALESTINE MONETARY AUTHORITY

Inflation Report

2017: Second Quarter

Volume 23

Suggested Citation:
Palestine Monetary Authority (PMA), 2017. Inflation Report: 2017: Second Quarter.
Ramallah – Palestine

All Correspondence should be directed to:
Palestine Monetary Authority (PMA)
P. O. Box 452, Ramallah, Palestine.

Tel.: (+970) 2 2415250

Fax: (+970) 2 2415310

E-mail: info@pma.ps
www.pma.ps

Executive Summary

During 2017Q2, consumer prices in Palestine decelerated on annual basis, registering inflation by 0.2 percent as a result of a slight inflation in the West Bank and a deflation in Gaza Strip. In general, inflation in Palestine is largely imported and highly sensitive to world prices, particularly for food and fuel, but we can say prices came well-below that for the MENA region.

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's basket.

Inflation forecasts show that consumer prices in Palestine are expected to grow by around 0.5 percent during 2017Q3, and to accelerate in the coming quarter. Accordingly, the inflation rate for 2017 as a whole is expected to grow to 0.6 percent, compared with deflation by 0.2 percent in 2016. 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 commodity markets, as predicted by the International Monetary Fund (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 a 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 0.5 percent under the baseline scenario to an average of 0.9 percent during 2017Q3. On the other hand, a negative one-standard deviation shock would bring inflation down to 0.1 percent.

Financial developments indicate that the lending rates (on the USD and the NIS) have all increased during 2017Q1. At the same time, the deposit rate on both the USD and the JD have increased, but declined on the NIS during the same period. Interest rates on the USD and the JD have been affected by their trends in the issuing countries, as they increased following the official prime rate hike in the US and Jordan. On a different note, the margin between lending and deposit rates in Palestine is noticeably higher than for its counterparts in the currency-issuing countries. During the quarter, the margin was about 4.7 percentage points on the USD, 4.6 percentage points on the JD, and 5.2 percentage points on the NIS.

Palestine Stock Exchange "PEX" experienced routine activities and low liquidity levels in most 2017Q2 weeks; however, it rebounded at the end of the quarter. As a result, al-Quds index closed at 544.4 points, the highest level in more than three years, owing to the strengthening investment index.

Contents

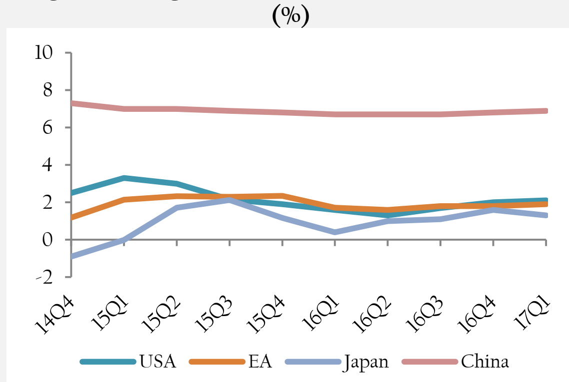
I. Recent Economic Developments

Real GDP

Signs of gradual recovery in global growth trends emerged on the onset of 2017, in light of growing coherence in performance among major economies. The U.S. economy marched steadily towards recovery as monetary policy tightened further. Gradual improvement was also witnessed in the Euro Area and Japan, owing to stimulus policies introduced in both regions. In contrast, discrepancies in growth trends persisted among emerging and developing economies, with major economies' performance ranging between relative acceleration in China and milder contraction in Brazil, in the absence of estimates for the group's total growth. In this light, the International Monetary Fund's expectations for global growth in the medium term remained unchanged at 3.5 percent in 2017 and 3.6 percent in 2018.[1]

A closer look at the data shows gradual acceleration in the U.S. economy, growing by 2.1 percent in 2017Q1, compared with 2.0 percent in 2016Q4, due to improvement in private investments and exports, and despite falling public spending. Yet signs of a tighter U.S. fiscal policy emerged following the presidential elections, amplified by a controlling republican majority in the Congress and Senate. As such, the IMF appeared less optimistic about future trends, lowering its forecasts for U.S. growth for 2017 and 2018 by 10 and 40 basis points, respectively, to 2.1 percent in both years.

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



Source: IFS database and: http://www.tradingeconomics.com.

Meanwhile, recovery slowly crept to the EA, with growth reaching 1.9 percent in 2017Q1 compared to 1.8 percent in the previous quarter. This came against the backdrop of better performance in the periphery, build-up in external demand on EA exports, and marked improvement in capital formation across member states. As a result, the IMF upgraded its growth expectations for the EA in 2017 by 20 basis points to 1.9 percent and by 10 basis points to 1.7 percent in 2018.

The same was true for Japan where relatively strong economic expansion proceeded, albeit at a slower pace. Real GDP grew by 1.3 percent in 2017Q1, compared with 1.6 percent in 2016Q4, in

[1] International Monetary Fund, World Economic Outlook. July, 2017.

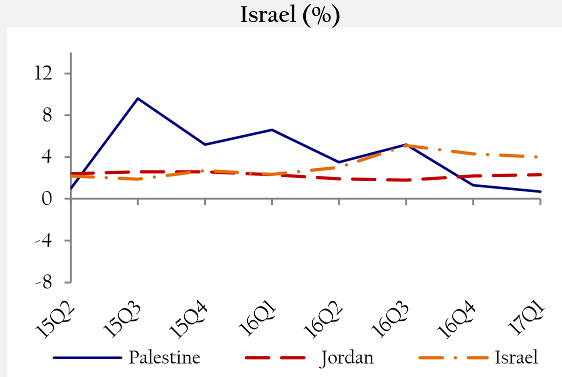
light of slowing public spending as opposed to a rather stable progress in private demand components. In light of these developments, IMF forecasts were upgraded by 10 basis points to 1.3 percent in 2017, while maintaining forecasts for 2018 at 0.6 percent.

Signs of pick-up in activity continued to emerge from China, with growth amounting to 6.9 percent in 2017Q1, compared to 6.8 percent in the previous quarter. This marginal improvement seems to result from strong industrial production, owing to a rise in exports, and to expansions in government spending and investment activity. However promising, such developments fall short of halting the forecasted slow-down in the medium term. As such, the IMF expects the Chinese economy to grow by 6.7 percent in 2017 and 6.4 percent in 2018.

In the meantime, the OPEC agreement to reduce oil production came into effect at the beginning of 2017Q1, with oil exporters in the MENA region slashing production levels in hopes of higher-priced equilibrium, and possibly incurring narrower growth horizons for producing states. This enforced market adjustment came amid lingering political and economic turmoil in the region, which continues to limit its capacity to achieve adequate growth levels, particularly in countries like Iraq, Syria, Egypt, Libya and Yemen. In this light, the IMF upheld its 2017 growth forecasts for the MENAP at a comparatively low level of 2.6 percent, while downgrading 2018 forecasts by 10 basis points to 3.3 percent. It is worth noting that growth remains susceptible to high fluctuations in light of political uncertainty and economic instability within the historically-volatile regional conditions.

On the regional front, high growth rates persisted in the Israeli economy. Real GDP grew by 4.0 percent y-o-y, compared to 4.3 percent in the fourth quarter; a consequence of improvement in government spending and strong private demand. The IMF upgraded its 2017 forecasts for Israeli growth by 10 basis points to 3.0 percent, equating growth forecasted in 2018.

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



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

The Jordanian economy continued to gain momentum in 2017Q1, with GDP growth rising slightly from 2.2 to 2.3 percent, at the backdrop of recovery in agriculture, mining and despite a decline in construction. In this light, the IMF showed higher optimism in the future, upgrading its growth expectations significantly to 3.7 percent in 2017 and 4.0 percent in 2018.

Locally, growth eased further during 2017Q1, contrary to regional trends. Real GDP in Palestine rose by a mere 0.7 percent y-o-y, compared with 1.3 percent in the previous quarter, owing to sluggish activity in the WB (0.8 percent versus 1.1 percent), and in GS (0.4 percent versus 1.7 percent).

Generally, growth in 2017Q1 was inhibited by deteriorating performance in several economic activities, starting with a 4.0 percent fall in construction, compared to a decline of 0.6 percent in 2016Q4, in light of interrupted flow of construction materials to GS. This is in addition to further shrunk in trade activities (3.3 percent versus 6.5 percent), particularly in the WB, owing to weak private demand, and a fall in communications, (4.1 percent versus a growth of 1.0 percent). Finally, value-added from agriculture contracted by about 19.3 percent y-o-y.

Growth also slowed in several sectors during the quarter, including manufacturing (from 7.0 to 4.1 percent) and services (from 1.8 to 1.7 percent) in light of decline in both activities in GS. Activity also slowed in transport and storage (from 21.8 to 11.4 percent), financial and insurance services (from 12.7 to 11.2 percent) and general administration and defense (from 4.2 to 3.1 percent).

Aggregate demand

Palestine's Gross Domestic Product during 2017Q1 amounted to USD 1,999.2 million in 2004 prices, of which the West bank acquired around 75 percent. Both the West Bank and Gaza Strip recorded slight growth versus both the corresponding and the previous quarters.

All aggregate demand's components have risen on y-o-y in the WB, except for the private consumption that shrunk by 2.9 percent. Public consumption has grown by 7.0, concurrent with slight improvement in investment by 0.6 percent. At the same time, exports jumped by 26.6 percent, along with slower imports' growth (6.2 percent), pushing the trade deficit down by 4.9 percent. As a result, the WB's GDP slightly grew by 0.8 percent on annual basis.

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

(USD million)

	West Bank			Gaza Strip		
	2016Q1	**2016Q4**	**2017Q1**	**2016Q1**	**2016Q4**	**2017Q1**
Private consumption	1,398.2	1,404.9	1,357.8	442.5	409.7	436.4
Public consumption	287.9	352	308.0	199.6	233.2	194.4
Investment	393.2	412.3	395.7	1.5-	30.7	37.4
Exports	321.4	428.1	406.9	21.7	18.6	20.1
Imports	915.8	1,068.0	972.4	159.1	189.6	183.2
GDP[2]	**1,494.4**	**1,505.3**	**1,505.8**	**491.3**	**492.0**	**493.4**

Source: PCBS.

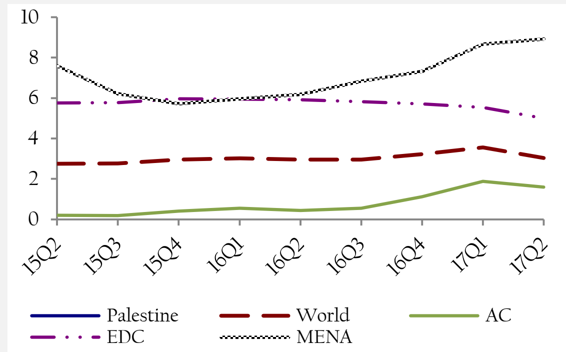
[2] The difference between the sum of former items and the GDP is the net errors and omissions.

Meanwhile, GS achieved a subdued y-o-y growth by 0.4 percent, exclusively owing to a higher investment (from USD -15 million to USD 37.4 million) resulted from slower withdrawal from inventories. However, other components deteriorated. Both private and public consumption fell by 1.4 percent and 2.4 percent, respectively. Exports also declined by 7.4 percent, along with imports growth by 15.1 percent and hence trade deficit notably widened by 18.7 percent.

Inflation

During 2017Q2, the global inflation rate has inclined to fall owing to the decline in world oil prices, registering a 3.0 percent inflation rate compared to 3.6 percent in the previous quarter (figure 3).

Figure 3: Inflation rates in World regions



Sources: IFS and PCBS.

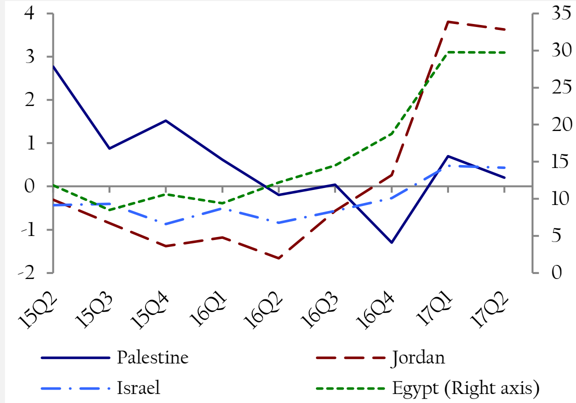
Both the advanced economies and the emerging and developing countries witnessed declined inflation, albeit at a varying degrees. Headline inflation declined in most advanced economies to below targeted level, but core inflation relatively stabilized. Head inflation declined in the US (from 2.8 percent to 1.9 percent), and in Euro Area (from 1.8 percent to 1.5 percent). Inflation in Japan maintained the very low levels, registering 0.4 percent inflation rate during April and May 2017. Accordingly, advanced economies' inflation dropped to 1.6 percent compared to 1.9 percent in the previous quarter.

Meanwhile in the emerging and developing countries, the decline proved to be slower in most economies except the significant drops in Russia, Brazil and, to lesser extent, in India. However, inflation in the biggest emerging economy (China) fell marginally by 3 basis points to score 1.4 percent. In sum, inflation in the emerging and developing countries dropped from 5.5 percent in months from January through March to around 5.0 percent in April and May.

In the Middle East and North Africa in particular, inflation is highly affected by various political and economic conditions in each country. But in general, there were signs of a gradual increase in inflation, growing from 8.7 percent in 2017Q1 to around 8.9 percent in April and May 2017.

Conversely, Palestine's neighboring countries (Jordan, Israel and Egypt) experienced a slight decrease in its inflation rates during the quarter. Inflation in Jordan dropped from 3.8 percent to 3.6 percent between first and second quarter of 2017. At the same time, it slightly declined in Israel from 0.5 percent to 0.4 percent.

Figure 4: Inflation rates in Palestine, Jordan, Egypt, and Israel



Sources: IFS and PCBS.

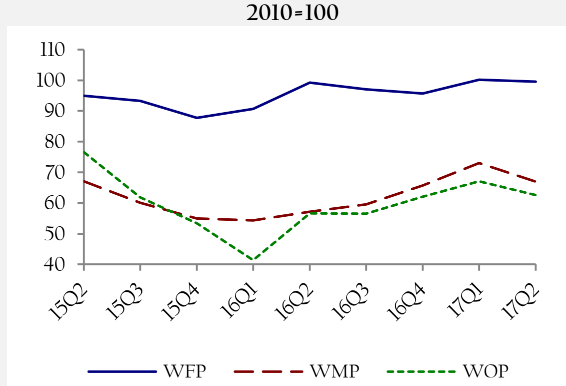
Meanwhile in Egypt, inflation continued to be the highest within the MENA region in light of several factors, not exclusively; depreciation in Egyptian pound and thus the increased cost of imports; and the rise in local commodity prices as the government lift the subsidies as part of reform program under the IMF supervision. However, inflation barely declined during April and May 2017, sticking to levels around 30.0 percent. In the meantime, local prices varied between shrunk and slight increases, resulting in a lower inflation rate (from 0.7 percent to 0.2 percent) in light of slight inflation in the West Bank and deflation in Gaza Strip.

Global and local prices

This section deals mainly with developments in local and global markets' commodity prices, the most important determinant of inflation trends. After a temporary increase in the last few months, global commodity prices resumed declining in 2017Q2 as it is shown in figure 5.

World oil prices (WOP), for example, started to grow at the end of 2016, following OPEC's decision to trim supply by 1.2 million barrel per day in light of oversupply, and to support the abating prices. WOP notably picked up till April 2017, when it resumed declining amid continued U.S. supply growth (production and inventories) and signs of weaker demand. Accordingly, WOP index shrunk on a quarterly basis by 6.7 percent, however it remained higher than the corresponding levels.

Figure 5: Indices of primary commodity prices, 2010=100



Source: IFS.

Likewise, world metal prices (WMP) have fallen during the quarter in line with expectations of a weakening demand due to credit tightening in China. Consequently, WMP index dropped by 83 percent on a quarterly basis, but grew on annual basis. Meanwhile, world food prices index (WFP) decreased in April due to the declines in prices of; sugar, vegetable oil and rice. However, they grew again in May and June, leading WFP to slightly fell by 0.6 percent compared to the previous quarter, and to stay close to the corresponding level.

Locally, prices witnessed disparate trends among commodity categories during 2017Q2, which led to slight inflation in the West Bank and price shrunk in Gaza Strip, and resulted in overall inflation by 0.2 percent. As inflation in Palestine is mainly imported, the depreciation of the USD, the Jordanian dinar and the Egyptian pound against the Israeli shekel have led to lower cost of imports, and hence low inflation rates.

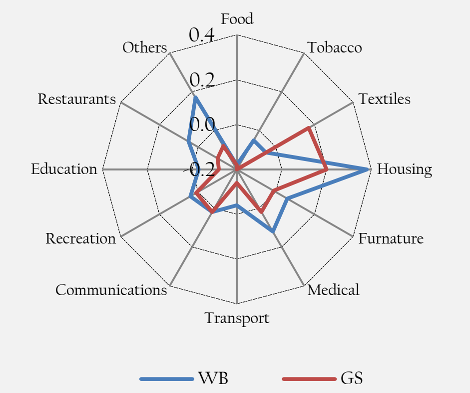
In the WB, the conflicting trends of price indices during 2017Q2 resulted in a subdued inflation by 0.5 percent on annual basis. From one hand, housing index significantly grew by 4.5 percent in light of increase in some relevant prices such as diesel, benzene and cooking gas. In addition, many services' indices; medical, restaurants and cafés, and recreational and cultural have all grown by 2.4 percent each. Meanwhile, the indices of textile, and tobacco and alcohol have both slightly increased by 0.7 percent each. However, the education services index declined by 0.6 percent, and the transportation index by 0.3 percent.

Likewise in GS, price indices experienced dissimilar trends, however the declines were more significant, pushing the consumer prices index to slightly fall by 0.4 percent on annual basis. Food price index declined by 0.5 percent, meanwhile the volatile tobacco and alcohol index remarkably fell by 5.7 percent. In addition, services indices of restaurants and cafés, education and transportation dropped by 5.6 percent, 3.3 percent and 1.7 percent, respectively, while declined in miscellaneous goods and services, and furniture were insignificant.

Conversely, textile index grew by 2.7 percent, followed by a rise in housing index by 2.5 percent, and affected by the increase in the relevant energy derivatives. Moreover, price indices of communication, medical services, and creational and cultural goods have all increased by less than 1.0 percent each.

It is worth to mention the hike in electricity price by 5.0 percent in the previous quarter followed its raise by the Israeli supplier was the main contributor to the inflation in the WB and GS through increasing housing price index (figure 6). Overall, it contributed by 0.38 percentage point to inflation in the WB, and by 0.23 percentage point in GS. Besides, decline in food index have negatively contributed to 2017Q2 inflation, and by 0.18 percentage point in the WB and GS, each.

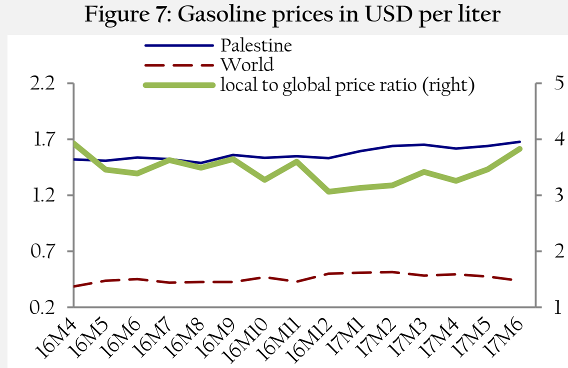
Figure 6: Web chart of the CPI components contribution to the inflation rate in Palestine 2017Q1



Regardless of different price determinants in the WB and GS, commodity prices in Palestine exceeded those in the world market, usually because the local prices increase almost as much as the global ones, but declined substantially lesser in case of global prices drop. It is worth mentioning that the movements among global prices are not reflected immediately in local prices, and usually take more time to adjust. During 2017Q2, movements of local commodity prices ranged between increases and declines, not always following the global prices.

The global prices of gasoline, a vital commodity for Palestinians, resumed falling during 2017Q2, declining by 6.7 percent from the previous level, however it remained higher than the corresponding level by 10.3 percent. At the same time, local gasoline prices grew by lesser than growth in global market due to the USD depreciation against the NIS. Consequently, a liter of gasoline grew by 8.1 percent y-o-y and by 1.0 percent q-o-q, reaching USD 1.7 (around NIS 5.9) in the local market, compared with USD 0.4 in the global market.

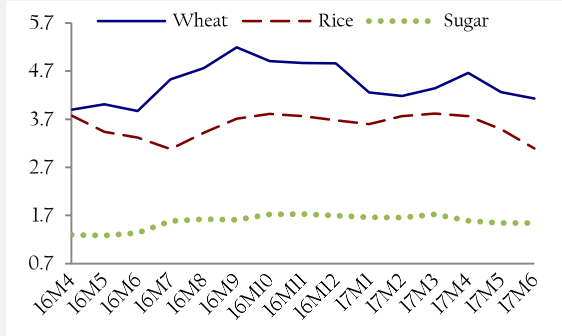
Figure 7: Gasoline prices in USD per liter



Source: PCBS and IFS.

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. However, the price gap have narrowed compared to the previous quarter for rice and sugar, but slightly widened for wheat. As a result, both wheat and rice prices in the local market amounted to 4.3 and 3.4 times their price in global markets, while local prices of sugar were around 1.6 times global prices (see Figure 8).

Figure 8: Local prices to global prices



Source: PCBS and IFS.

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 1.2 times the world price, while beef meat prices were around three times world prices as for 2017Q2. Table (2) shows price developments for some selected commodities (imported and non-imported) in the local market during the current and the previous quarters.

Table 2: Prices of selected commodities in Palestine NIS per unit[3]

	2016			2017	
	Q2	Q3	Q4	Q1	Q2
Rice	134.3	134.7	131.1	129.0	125.5
Wheat	143.0	141.1	137.5	137.5	137.9
Bread	3.7	3.7	3.7	3.6	3.6
Beef meat	53.2	53.2	49.6	45.1	45.6
Chicken meat	13.7	14.5	13.7	15.1	13.8
Powder Milk (Nido)	95.9	94.4	93.4	91.1	92.4
Yogurt (local)	4.9	5.0	4.9	4.6	4.6
Chicken Eggs	11.3	13.8	15.0	15.4	13.2
Tomatoes	2.5	3.9	2.7	3.2	2.9
Sugar	130.9	147.0	149.7	143.1	131.4
Gas	57.2	58.1	58.9	64.4	63.6
Diesel	5.2	5.3	5.4	5.6	5.4
Gasoline 95	5.8	5.8	5.9	6.1	5.9

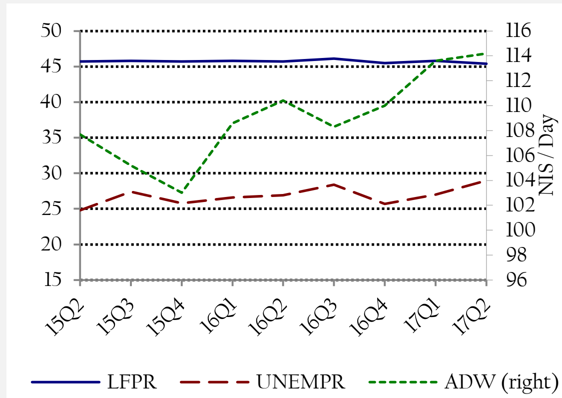
Source: PCBS

[3] 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

The number of labor market entrants rose during 2017Q2 by 34,100 persons from the corresponding quarter. However, the participation rate declined by 0.3 percentage points to 45.4 percent[4]. Rather than creating sufficient new jobs in order to meet the new entrants, the labor market instead lost some existing jobs. Gazan labor market lost around 8 thousand existing jobs, while the new entrants amounted to 5 thousand, causing a higher unemployment rate between 2017Q2 and 2016Q2 (from 41.7 percent to 44.0 percent). Similarly in the WB, while new entrants amounted to 30 thousand, around 12 thousand persons lost their jobs leading to higher unemployment. Under these circumstances, the unemployment rate would have possibly jumped to 22 percent, but the absorption of additional 14 thousand workers by the Israeli market had mitigated unemployment, pushing the rate up to 20.5 percent, compared to 18.3 percent in 2017Q1.

Figure 9: Labor force main indicators in Palestine



Source: PCBS.

It is worth mentioning the growing number of the WB's workers in Israel and settlements[5], reaching 128 thousand workers during the quarter (about 19 percent of the total workers from the WB). Given the sizeable wage differential between Israeli and the WB labor markets, the significant number of Palestinian workers in Israel substantially influences wages and prices in Palestine. The wage 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 2017Q2, the WB average daily wage increased y-o-y by 5.5 percent, reaching NIS 103.7. Conversely, it declined for Gazans by 2.8 percent to NIS 59.9. Meanwhile, a

[4] The number of individuals in working age (15 years and above) in Palestine reached 3,012,400 persons during 2017Q2.
[5] Gazan workers were banned from entering the Israeli market directly after the unilateral Israeli withdrawal from Gaza Strip in 2005.

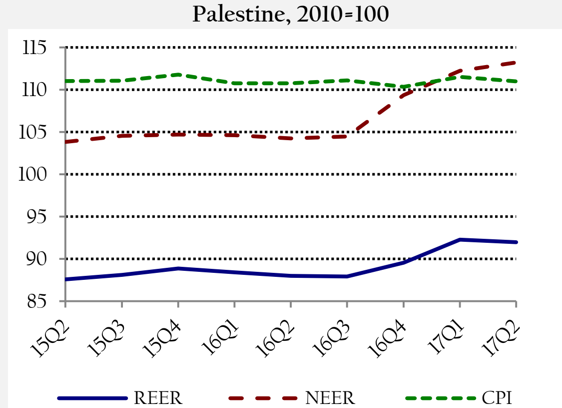
worker's average daily wage in Israel and the Settlements has slightly grown by 0.3 percent, reaching its highest ever at NIS 222.6, or 2.1 times the wage in the WB.

The reciprocal relation between prices and wages implies that when inflation exceeds the rise in the average nominal wage, the purchasing power of wages decline, and vice versa. During 2017Q2, the WB's inflation was lower than the nominal wage growth, and hence the real wage grew slightly, by 0.5 percent. Meanwhile in GS, the registered deflation somewhat mitigated the decline in nominal wages, leading to lower decrease in real wages by 2.3 percent. Moreover, workers paid in USD and JD experienced more purchasing power's erosion due to exchange rate depreciation. As a result, their purchasing power declined by 0.8 percent for the WB's workers and by 8.2 percent for Gazans.

Effective exchange rates

Figure (10) shows the nominal and real effective exchange rates (NEER and REER) in Palestine[6]. 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 partners[7].

Figure 10: Effective exchange rates and CPI in Palestine, 2010=100



Source: PMA and PCBS.

Data show that the NEER has appreciated by 0.9 percent during 2017Q2 compared with the previous quarter, which reflects the NIS strength and indicates its appreciation against Palestine trading partners' currencies.

[6] 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.

[7] NIS is the currency used in the calculation of the CPI and thus NEER and REER.

This comes as the bilateral exchange rate of the NIS against currencies of; the US, China, Jordan, Turkey and Egypt, have all depreciated during the same period. Conversely, the REER slightly depreciated by 0.3 percent 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

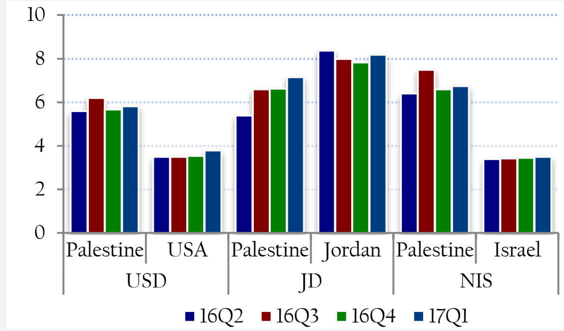
This section deals with the development in the lending and deposits interest rates of the three currencies circulated in Palestine; the USD, the JD and the NIS. Those rates in Palestine frequently move over time according to several factors: the level of cash in the banks operating in Palestine; interbank competition; risks estimated by banks; and changes in the monetary policies in the issuing countries of the currencies locally circulated. It is worthy to mention the importance of tracking the rates' movements in this report as they influence money supply, and hence investment, consumption and prices.

The types of lending and deposit rates differ from one country to another, and for the purpose of comparisons in this report, and as long as it is possible, we will use the rate on loans as a proxy for the lending rate, and the time-deposit rate as the deposit rate.

During 2017Q1, central banks in the U.S. and Jordan have both raised their official interest rates, which lead to higher lending and deposit rates. Meanwhile, Bank of Israel maintained the two years-unprecedented low interest rate at 0.1 percent.

In sum, lending rates have increased on the USD in the U.S. (from 3.55 percent to 3.79 percent) and on the JD in Jordan (from 7.83 percent to 8.18 percent). Meanwhile, it is trivially rose on the NIS in Israel (from 3.46 percent to 3.50 percent). The movement of the three lending rates in Palestine proved to be the same to its trend in issuing countries. Local lending rate increased on the USD (from 5.76 percent to 5.82 percent), on the JD (from 6.62 percent to 7.16 percent) and on the NIS (from 6.60 percent to 6.75). Although it is not possible to confirm the direct and immediate impact of the lending rates' developments on the expenditure and consumption, the national accounts data indicates decline in both the private and public consumption in the WB and GS concurrent with higher local lending rates.

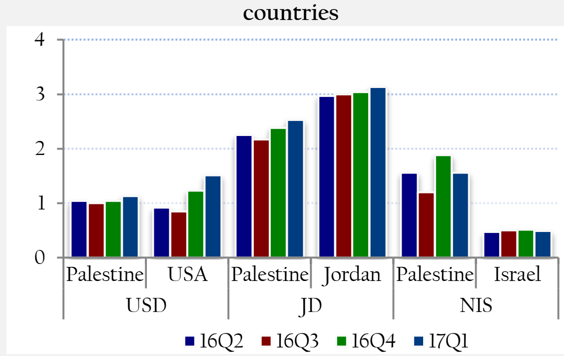
Figure 11: Lending rates in Palestine and issuing countries



Source: PMA and IFS.

The similar trend of the lending rates in Palestine and the issuing countries during 2017Q1 may indicate the influence of the developments in issuing countries over the domestic rates, particularly the monetary policy developments. This could be proved more by tracking the deposit rate developments this quarter. The countries who lifted their official interest rate (the US and Jordan) experienced higher deposit rates; (from 1.23 percent to 1.51 percent) on the USD, and (from 3.04 percent to 3.13 percent) on the JD. Simultaneously, deposit rate in both currencies in Palestine increased (from 1.04 percent to 1.13 percent on the USD, and from 2.38 percent to 2.55 percent on the JD). Meanwhile on the NIS, its deposit rate slightly declined in both Israel by 2 basis points to 0.49 percent, and Palestine from 1.88 percent to 1.56 percent.

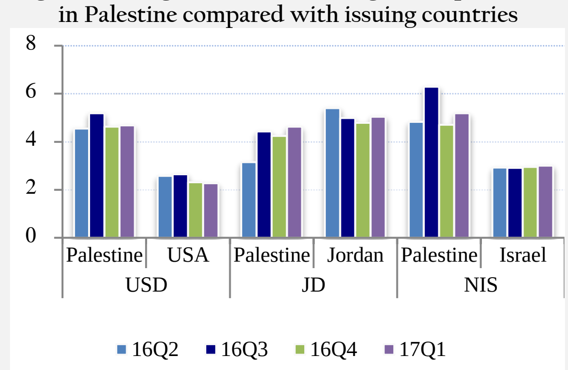
Figure 12: Deposit rates in Palestine and issuing countries



Source: PMA and IFS.

Tracking lending and deposit rates during the previous quarters reveals that lending rates on the USD and the NIS in Palestine are higher than their counterparts in the countries of origin. On the other hand, the deposit rates in Palestine are very low, and sometimes lower than their counterparts in issuing countries. Consequently, the margins between the average lending and deposit rates in Palestine remain remarkably high and ranged between 4.6 percentage point and 5.2 percentage point during 2017Q1. At the same time, it is significantly lower in the issuing countries (see Figure 13). For example, it is around 2.3 percentage point in the U.S. and about 3.0 percentage point in Israel. The high domestic margin reflects high risks within a politically and economically unstable environment.

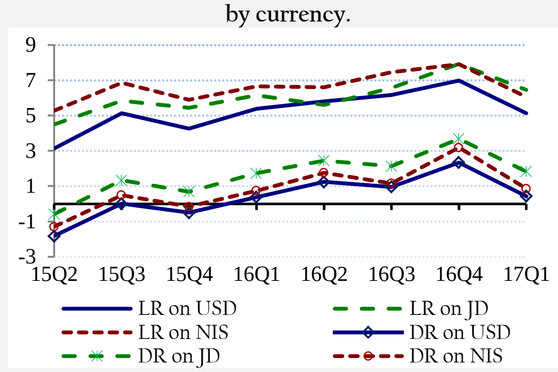
Figure 13: Margins between lending and deposit rates in Palestine compared with issuing countries



Source: PMA and IFS.

It is important to stress that the real interest rate equals the nominal interest rate minus the inflation. As the inflation rate exceeds the nominal deposit rate, an individual's willingness to keep money as bank deposits will decline as it entails lower real value and declining purchasing power, and vice versa. During 2017Q1, inflation by 0.7 percent led to a lower real deposit rate for the three currencies, (reaching to 0.4 percent on the USD, 1.8 percent on the JD and 0.9 percent on the NIS). Moreover, inflation also implies lower real values of credit facilities, pushing real lending rate down to 5.1 percent on the USD, 6.5 percent on the JD, and 6.1 percent on the NIS (figure 14).

Figure 14: Real lending and deposit rates in Palestine by currency.



Source: PMA and PCBS.

Stock market

Palestine Stock Exchange "PEX" experienced slow liquidity levels during 2017Q2, owing to the intensive profit distributions, especially at the beginning of the quarter. Except of some transaction on leading companies' shares in mid-quarter, most quarter remained in the absence of significant events warranting unusual market activity. However, market performance rebounded in the last two weeks owing to the investment's strong activity, whose index widely grew by 14.9 percent. In addition, both industry and insurance indices grew by 1.4 percent and 0.9 percent, respectively. In contrast, indices of services and banking fell by 3.5 percent and 1.9 percent, respectively. As a result, Al-Quds index closed at its highest in around three and a half year (544.4 points), growing by 1.0 percent from the previous closing (table 3).

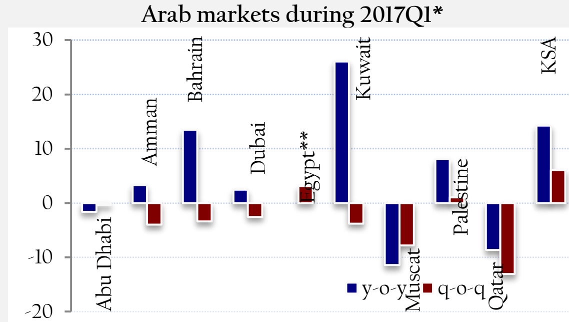
Table 3: Palestine stock exchange index (Al-Quds index)*

	2016			2017	
	Q2	Q3	Q4	Q1	Q2
Banking	132.4	136.7	144.4	153.0	150.0
Industry	72.2	75.3	78.2	78.3	79.4
Insurance	60.1	62.4	67.1	68.2	68.7
Investment	25.2	26.1	26.3	25.0	28.8
Service	44.4	45.3	45.0	45.1	43.5
Al-Quds	**503.8**	**518.6**	**530.2**	**538.9**	**544.4**

Source: www.pex.ps
* end of period.

Regionally, the Gulf stock markets incurred losses during the same quarter due to oil prices decline. The stock exchange indices of Oman, Kuwait, Bahrain, Dubai and Abu Dhabi have all declined from the previous closing by 7.8 percent, 3.8 percent, 3.4 percent, 2.5 percent and 0.4 percent, respectively. Moreover, after some Arab countries cut the ties with Qatar, its stock exchange index fell sharply by around 13.1 percent.

Figure 15: Stock markets performance, some selected Arab markets during 2017Q1*



Source: http://www.gulfbase.com, http://www.ase.com.jo, and http://www.egx.com.eg.
* end of period.
** Index of Egyptian stock exchange jumped by 93 percent from the corresponding quarter.

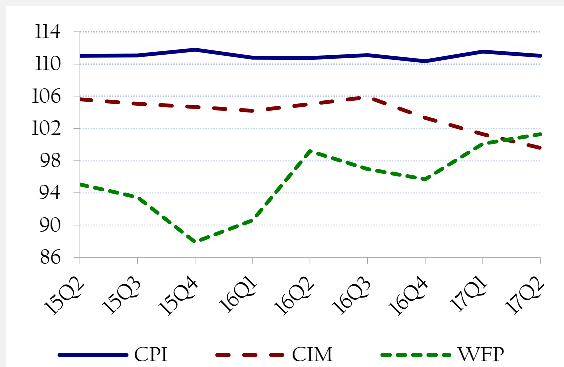
Meanwhile in Saudi Arabia stock exchange, its index declined through most quarter due to abating oil prices, however it experienced a notable jump starting from mid-June. This comes as the MSCI named Saudi Arabia to its Emerging Market Index Watch List, which is expected to draw billions of dollars to the country. Accordingly, the index closed higher by 6.1 percent from the previous closing (figure 15).

Meanwhile in the neighboring countries, Amman Stock Exchange index failed to maintain the previous quarter's high level, declining by 4.0 percent in light of dividends' payout and the associated speculative trading. Conversely, the Egyptian Exchange continued to rebound as investors' confidence improved, owing to the three-year reform program under the IMF supervision, and the upgraded credit rating by some rating agencies. Consequently, Egyptian Exchange index grew by 3.1 percent from the previous quarter closing.

III. Model Based Inflation Forecast

Inflation model and estimation technique

Figure 16: CPI, CIM, and WFP



Source: PCBS, PMA, and IFS.

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 Palestine[8].

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.

To this end, 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,

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

Smith (2001). The third is the semi-parametric Fully Modified OLS (FMOLS) approach of Phillips and Hansen (1990).

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 2017Q2-2018Q4. 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. Thus, under the low inflation rate in Israel, and the appreciated NIS against other trading partners' currencies, CIM is calculated to decline by 1.4 percent in 2017, and to increase by around 3.8 percent in 2018.

The most recent IMF forecasts indicate that the world food prices will increase in 2017 and by slower pace in 2018. Accordingly, we calculate that the world food prices will rise by around 5.4 percent in 2017 and slightly by 1.3 percent in 2018.

Inflation will be forecasted according to the above-mentioned three estimation techniques[9], 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

Table 4: Inflation outlook of the three models

	Assumptions		Inflation Forecasts			
	CIM	WFP	VECM	ARDL	FMOLS	Aveg.
2016*	**0.12-**	**1.93**	**0.22-**	**0.22-**	**0.22-**	**0.22-**
17Q1*	2.77-	10.52	0.67	0.67	0.67	0.67
17Q2*	3.52-	0.40	0.23	0.23	0.23	0.23
17Q3	1.51-	4.77	0.18	0.66	0.63	0.49
17Q4	2.27	6.37	1.23	0.96	1.10	1.09
2017	**1.39-**	**5.40**	**0.57**	**0.62**	**0.65**	**0.61**
18Q1	4.78	1.95	1.33	1.04	1.17	1.18
18Q2	5.41	2.65	1.64	1.56	1.62	1.61
18Q3	2.91	0.53	1.14	0.87	0.91	0.98
18Q4	2.10	0.12	1.05	1.96	1.96	1.61
2018	**3.77**	**1.31**	**1.29**	**1.36**	**1.38**	**1.34**

* Actual data.

[9] VECM, ARDL, and the FMOLS.

models. Accordingly **the average annual inflation forecast for 2017Q3 will be 0.5 percent, and we expect inflation to increase gradually in upcoming quarter, ending the year 2017 as a whole by 0.6 percent inflation** (Table 4).

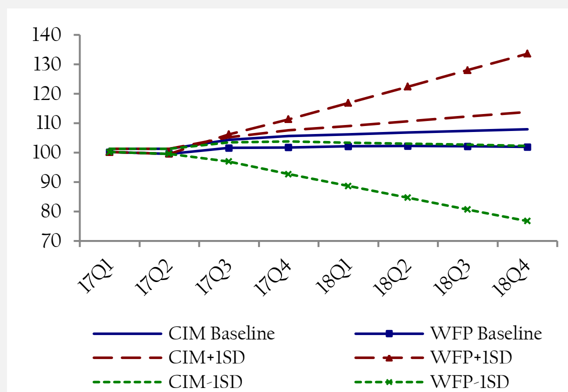
IV. The Balance of Inflation Risk

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.

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 kurtosis[10], 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 17).

Figure 17: Scenario assumptions for CIM and WFP



[10] Kurtosis measures the peakedness or flatness of the distribution of the series.

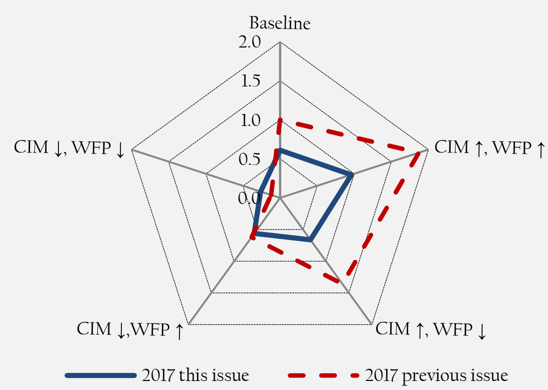
The results of these scenarios are displayed in table (5). They indicate that, given the assumptions, the average inflation forecasts during 2017 would range between 0.3 percent and 0.9 percent, with 0.6 percent as the central baseline outlook. In 2018, the average inflation forecasts are expected to range between -1.4 percent and 4.1 percent, with 1.3 percent as the central baseline outlook.

Table 5: Baseline and risk analysis of the CPI in Palestine for 2017 and 2018 (Percentage point)

Scenario	Shock	Implied annual growth rate CIM		Implied annual growth rate WFP		Implied inflation forecast	
		2017	2018	2017	2018	2017	2018
1	Baseline	1.39-	3.77	5.40	1.31	0.61	1.34
2	+1SD CIM +1SD WFP	0.73-	7.28	9.11	20.04	0.96	4.13
3	+1SD CIM -1SD WFP	0.73-	7.28	1.80	15.08-	0.66	1.21
4	-1SD CIM +1SD WFP	2.06-	0.36	9.11	20.04	0.56	1.39
5	-1SD CIM -1SD WFP	2.06-	0.36	1.80	15.08-	0.26	1.44-

Figure (18) shows the current risk analysis of inflation in Palestine during 2017 compared with the risk analysis for the same year predicted in the previous report. The figure shows 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.

Figure 18: Web chart of the balance of Palestine's inflation risk



CIM: Cost of imports
WFP: World food price index
↑: Increase by one-standard deviation
↓: Decrease by one-standard deviation

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, resulting in delays and/or disruptions in payment of government employees' salaries, which depresses demand and causes a fall in prices.

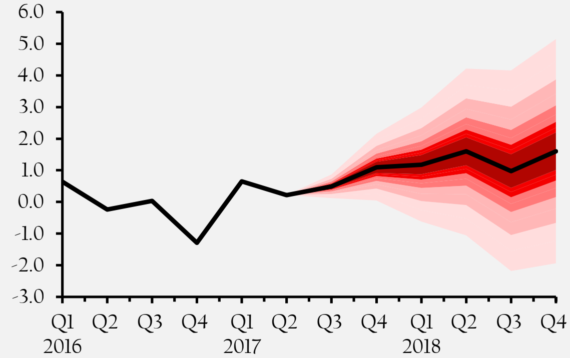


Figure 19: Fan chart of the balance of Palestine inflation risk during 2017Q3 – 2018Q4

Figure (19) shows the fan chart of the balance of Palestine's inflation risk during 2017Q3–2018Q4. 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.