Chapter 2
Quarterly Forecast for 2016–17

2.1 Assumptions on Exogenous Variables

2.1.1 Growth Rates of the United States and the Euro Area

The outcome of the UK vote to exit from the European Union in June 23, 2016, has reinforced uncertainty about the global outlook for 2016-17 and increased expectations of more easing monetary policy in advanced economies. According the *World Economic Outlook Update (WEO Update)* released by the International Monetary Fund (IMF) on July 19, 2017, the US economic growth is forecast at 2.2% in 2016 and 2.5% in 2017. However, the real GDP growth rate in the second quarter released recently is only 1.1%, less than half of the market expectation. Taking this into account, even though the US economy growth is being on a steadily upward trend, forecasts for 2016 and 2017 are both marked down by 0.2 percentage points relative to the July 2016 *WEO Update* by the IMF, to 2 and 2.3%, respectively.

In addition, according to the *WOE Update*, we assume that the euro area GDP growth are expected to go up by 1.6% in 2016 and 1.4% in 2017. Quarterly, the US and euro area growth rates are shown in Fig. 2.1.

2.1.2 The Exchange Rates

Since 2015, China's benchmark lending rates have been cut five times by the central bank, fiscal policy has turned expansionary, infrastructure spending has gone up, and credit growth has accelerated. Now that newly issued money has

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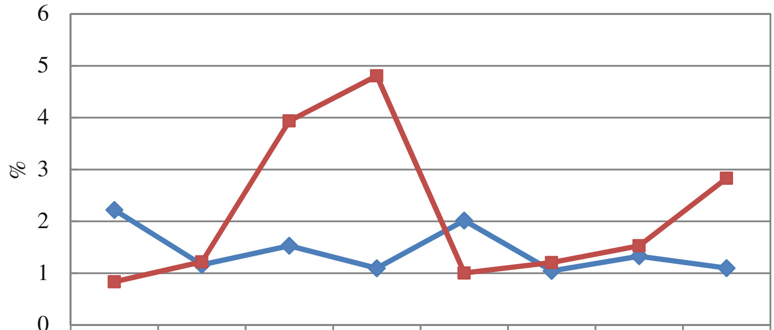


	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
EA_GDP_C	2.2	1.2	1.5	1.1	2.0	1.0	1.3	1.1
USA_GDP_C	0.8	1.2	3.9	4.8	1.0	1.2	1.5	2.8

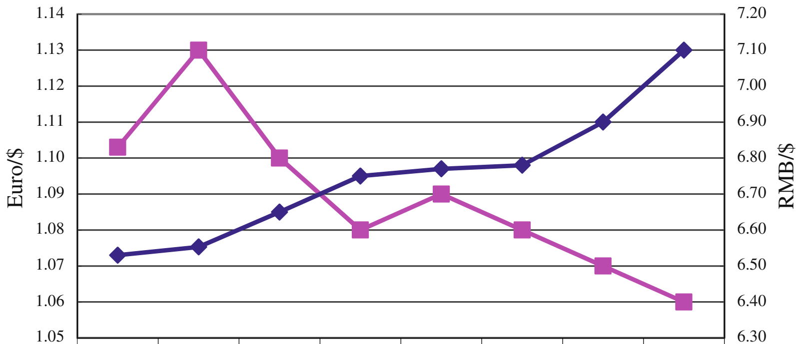
Fig. 2.1 Assumptions on growth rates in the US and the euro area. Seasonally adjusted QoQ. *Note* EAGDP_C denotes real growth rate in the euro area, and USGDP_C denotes real GDP growth rate in the US. *Source* CQMM team assumptions

increased distinctively, RMB has to bear depreciation pressures. When RMB depreciation triggered notable capital outflows after August, 2015, the intensification of China's capital control subsequently stabilized the RMB. However, though the capital outflows have been slowed, the long-term RMB depreciation expectations remain. The RMB exchange rate is expected to be down to 6.75 yuan and 7.1 yuan against the dollar at the end of 2016 and 2017 respectively.

Given its stance of easing monetary policy and the uncertainty enforced by the UK referendum, the European Central Bank is expected to boost the euro area economy via weak euro. In the meantime, the upward trend in the US economic growth helps to form dollar appreciation expectations. In the second half of 2016, the euro would continue depreciating. The euro is expected to be at 1.08 dollars at the end of 2016 and 1.06 dollars at the end of 2017 respectively (see Fig. 2.2).

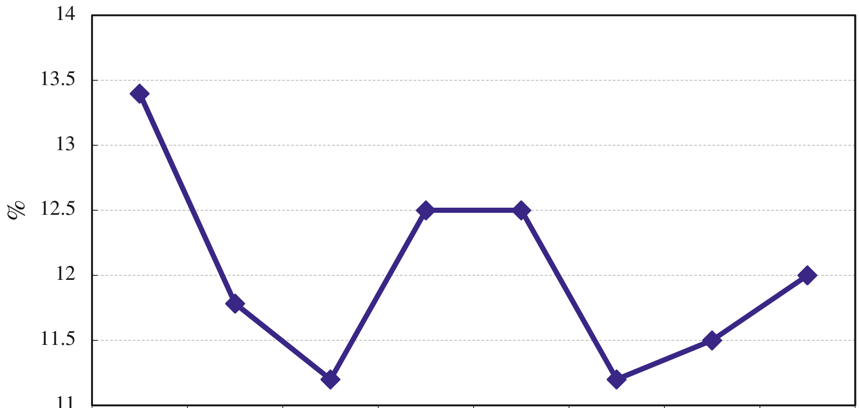
2.1.3 Growth Rate of the Broad Money Supply (M2)

China's M2 growth were up by 13.4 and 11.8% in the first and second quarter of 2016 respectively. Given various downward pressures on the economy, in order to meet expectations of China's GDP growth, the central bank is expected to expand the money supply by making one cut in interest rates and one cut in reserve



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
USDEURO	1.10	1.13	1.10	1.08	1.09	1.08	1.07	1.06
ER_W	6.53	6.55	6.65	6.75	6.77	6.78	6.90	7.10

Fig. 2.2 Assumptions on exchange rates changes. YoY. *Source* CQMM team assumptions



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
M2	13.4	11.8	11.2	12.5	12.5	11.2	11.5	12.0

Fig. 2.3 Assumptions on M2 growth rates. YoY. *Source* CQMM team assumptions

requirement ratio. The growth rate of M2 in 2016 is assumed to be at 12.5%. On account of the current large base of M2, which is more than one time over the GDP, and China's central bank is actively trying other ways to increase the social funds, the M2 growth in 2017 is expected to sustain stable at 12% (see Fig. 2.3).

2.2 Quarterly Forecast for China Major Macroeconomic Indicators in 2016–17

2.2.1 GDP Growth Rates

Based on the above assumptions on exogenous variables in the China Quarterly Macroeconometric Model (CQMM), it is forecast that China's GDP growth rate would be 6.63% YoY in 2016, a decrease of 0.27 percentage points over 2015. In 2017, China's economic growth is expected to edge down. The GDP growth is expected to fall to 6.54%, 0.09 percentage points lower than that in 2016.

Quarterly, China's GDP growth is projected to shrink to 6.56 and 6.52% in the third and fourth quarter of 2016 respectively. And thus the whole year of 2016 would see the GDP growth rates showing a downward trend. As to 2017, not only the stimulatory effect of RMB depreciation and slow recovery of US economy on the international side, but the positive effects of industrial structure adjustment on the domestic side, are expected to support bolstering up China's economic growth. The GDP growth in 2017 would be on a high-low trend, up by 6.61% YoY in the first quarter and then slowing down to 6.52% in the fourth quarter (see Fig. 2.4).

2.2.2 Major Prices Indices

According to the CQMM forecasts, the CPI is projected to rise 2.01% YoY, an increase of 0.57 percentage points over 2015, and it would be down to 1.71% in 2017, suggesting that China's inflation is expected to maintain at a steady, moderate pace.

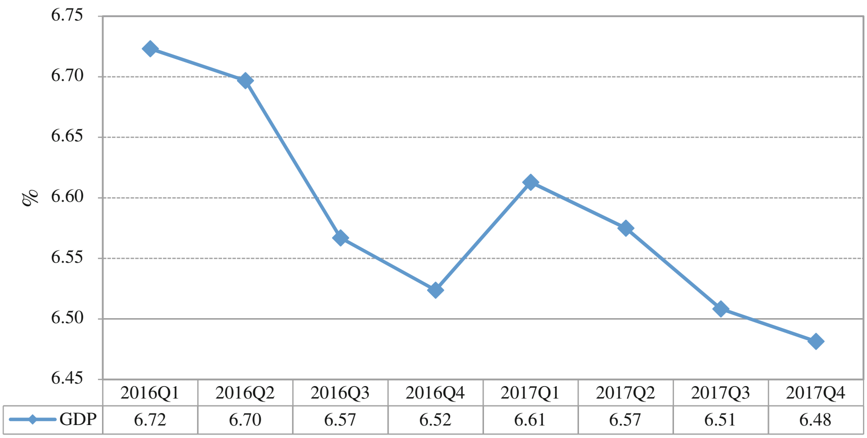
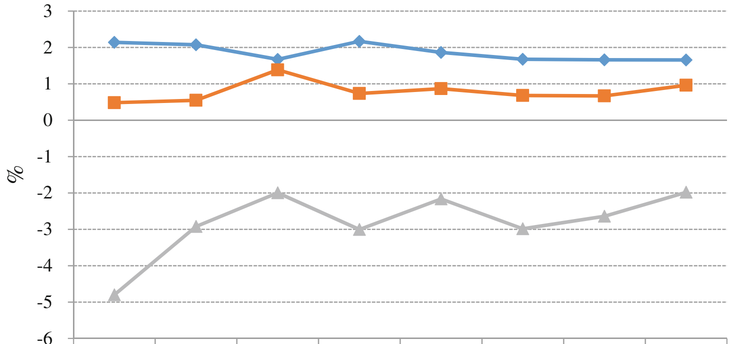


Fig. 2.4 Projected GDP growth rates, YoY. *Source* CQMM team calculations



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
CPI	2.14	2.07	1.67	2.17	1.86	1.68	1.66	1.65
P_GDP	0.48	0.55	1.38	0.73	0.87	0.68	0.67	0.96
PPI	-4.80	-2.92	-2.00	-3.01	-2.17	-2.99	-2.64	-1.98

Fig. 2.5 Projected growth rates of price indices, YoY. *Note* CPI denotes the consumer prices index, P_GDP denotes the GDP deflator, and PPI denotes the producer price index. *Source* CQMM team calculations

Quarterly, even though the CPI climbed 2.17% in the first quarter of 2016 due to a surge in pork and vegetable prices growth, its growth declined to 2.07%. The CPI growth is projected to continue falling to 1.67% and pick up to 2.17% in the fourth quarter. The decelerating economy growth in 2017 would drag the CPI growth down. The CPI is projected to rise 1.86 and 1.65% in the first and second quarter respectively (see Fig. 2.5).

The producer price index (PPI) is forecast to continue staying in the negative territory, while the decline of rate would slow further. The PPI is projected to fall by 3.19 and 2.45% in 2016 and 2017 respectively. The easing of PPI decline would help improve profits of upstream enterprises in means of production and relieve corporate debt load.

Quarterly, due to the rise of prices in bulk commodities, the decline in PPI in the second quarter of 2016 once slowed, down by 2.92%. Nevertheless, large uncertainty in the bulk commodity prices remains. PPP is projected to decline by 2% in the second quarter, and further drop by 3.01% in the fourth quarter. In 2017, as the measures to cut overcapacity is expected to play a bigger role, the decline in PPI would continue slowing. PPI growth is projected to go down by 1.98% in the fourth quarter of 2017(see Fig. 2.5).

The GDP deflator (P_GDP) is projected to rise by 0.79% in 2016, and the level is to expected to maintain in 2017, suggesting that deflation risks remain low. Quarterly, the GDP deflator slightly picked up in the first half of 2016, and it is expected to maintain modest growth. Due to the pickup of PPI in the third quarter, the GDP deflator is projected to rise by 1.38 and 0.73% in third and fourth quarter respectively. After that, since the decline in the PPI is expected to slow, the GDP deflator is expected to increase, its growth rate is forecast to rise to 0.96% in the fourth quarter of 2017 (see Fig. 2.5).

2.3 Growth Rates of Other Major Macroeconomic Indicators

2.3.1 Growth Rates of Exports, Imports, and Foreign Exchange Reserves

Brexit, together with the much lower-than-expected US GDP growth rate in the second quarter of 2016, heightened uncertainty about the global market. Nevertheless, the effects of RMB depreciation on foreign trade, and the ongoing implementation of "one belt, one road" policy, are expected to offset the downside risks of continued decline in exports. In addition, affected by decelerating domestic economic growth, imports growth would remain sluggish.

According to the CQMM, the total value of exports in dollar term (measured at current price) is forecast to be down by 6.01% in 2016, a drop of 3.79 percentage points over 2015. The total value of imports is projected to be down by 14.12%, matching its 2015 level (see Table 2.1).

Exports growth is expected to continue falling in the second half of 2016, down by 5.53 and 4.69% in the third and fourth quarter respectively. Owing to low prices of bulk commodities and RMB depreciation, import growth is expected to shrink by 6.65%. Nevertheless, as the process of cutting overcapacity accelerates and RMB depreciates further, the decline in import growth may not slow. Its growth is projected to continue to decline by 17.9% and 18.9% in the third and fourth quarter respectively. In 2016, the value of net exports is forecast to account for 1.25% of GDP.

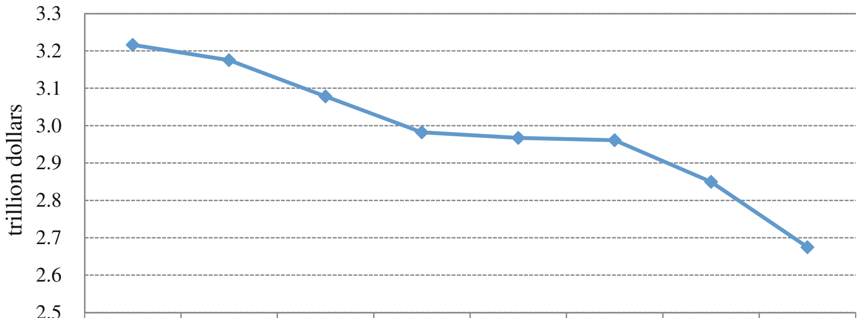
Though the likelihood for the US to raise interest rates in the second half of 2016 had decreased, due to economic slowdown, RMB depreciation expectations and pressures of capital outflows still remain, suggesting that China is expected to deplete its foreign exchange reserves to stabilize RMB. China's foreign exchange reserves is projected to fall to 2.98 trillion dollars at the end of 2016.

In 2017, owing to the recovery of external market demand, such as the recovery of US economy, and RMB depreciating further, China's exports are expected to rebound. The exports growth is projected to go up by 1.65%. As the increase in exports of processing trade is expected to lead to the increase in imports of processing trade, the decline in imports is expected to slow significantly, imports growth is expected to be down by 5.87%. Foreign exchange reserves at the end of 2017 is projected to fall to 2.67 trillion dollars (see Fig. 2.6).

Table 2.1 Projected growth rates of foreign trade (%)

	Exports				Imports				Net exports as a share of GDP
	Constant price/RMB	Current price/US dollars	General trade at current price/US dollars	Processing trade at current price/US dollars	Constant price/RMB	Current price/US dollars	General trade at current price/US dollars	Processing trade at current price/US dollars	
2016	3.92	−6.01	−2.76	−12.22	3.97	−14.12	−13.85	−13.82	1.25
Q1	−0.31	−9.54	−7.33	−15.62	4.73	−13.07	−14.00	−17.51	0.87
Q2	5.34	−4.14	−0.99	−11.85	17.07	−6.65	−3.61	−15.17	1.35
Q3	5.02	−5.53	−1.42	−12.10	−0.43	−17.90	−19.42	−10.06	1.38
Q4	5.71	−4.69	−1.10	−9.17	−4.59	−18.90	−18.60	−12.34	1.39
2017	6.01	1.65	2.53	3.09	−1.74	−5.87	−10.04	4.27	1.14
Q1	8.20	3.91	5.19	5.23	2.57	−4.00	−8.89	6.64	0.95
Q2	3.05	−0.92	−0.61	2.20	−11.02	−13.18	−18.86	5.04	1.30
Q3	4.91	1.10	2.04	2.19	1.26	−1.81	−4.04	2.61	1.14
Q4	7.89	2.57	3.57	2.78	1.54	−3.47	−6.53	2.91	1.18

Source: CQMM team calculations



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
fer	3.22	3.18	3.08	2.98	2.97	2.96	2.85	2.67

Fig. 2.6 Projected changes in foreign reserves. *Note* FER denotes foreign exchange reserves. *Source* CQMM team calculations

2.3.2 Growth Rates of Investment in Fixed Assets

In the second half of 2016, the excess capacity in manufacturing, the overstocking in real estate, and financial risks implied by high corporate leverage, will continue to curtail investment growth. Especially, the private investment growth is expected to slow down.

Growth of the FAI (excluding rural households) is forecast to expand by 9.72% in 2016, 0.47 percentage points lower than that in 2015. Its rate is expected to fall to 6.38% in 2017, 3.34 percentage points lower than that in 2016. Owing to the frenzied housing market, the total FAI picked up by 10.38% in the first quarter of 2016, but dropped to 8.13% in the second quarter. In the second half of 2016, the FAI is expected to be promoted by active fiscal policy. Its growth is projected to rise 10.26 and 10.11% in the third and fourth quarter respectively. Owing to downturn in property and shrinking of private investment, its growth rate in 2017 is expected to fluctuate around low levels, which reaches the highest of the whole year, say, 7.04%, in the second quarter.

The social FAI growth rate in 2016 is projected to stay at 8.97%, an increase of 0.84 percentage points over 2015. It is expected to fall to 6.51% in 2017. In terms of Source of funds, as shown by Table 2.2, the growth rate of FAI from state budget is forecast to maintain at 20.1% in 2016, and then slightly fall to 19.67% in 2017. The growth rate of FAI from domestic loans is expected to rebound to 14.87% in 2016, and then decline to 8.4%. The growth rate of FAI form self-funding is projected to reach 1.6% in 2016, and then climb to 2.02% in 2017. The growth rate of FAI from others is expected to rise to 39.93%, and then fall to 19.1% in 2017. In summary, due to the slowdown of manufacturing and private investment growth, the structure of Source of funds is expected to change, where the FAI from self-funding would drop dramatically, and those from others and domestic loans would expand slightly (see Fig. 2.7).

Table 2.2 Projected growth of total FAI by Source of funds (%)

	Total	State budget	Domestic loans	Self-raising funds	Others
2016	8.97	20.10	14.87	1.60	39.93
Q1	6.85	16.54	13.68	−0.01	31.33
Q2	8.86	24.63	11.64	2.28	41.86
Q3	9.32	20.95	12.98	2.60	41.70
Q4	10.69	18.48	21.38	1.49	43.93
2017	6.51	19.67	8.40	2.02	19.10
Q1	8.29	20.37	7.41	3.15	31.11
Q2	7.07	18.43	9.82	1.90	19.71
Q3	5.78	19.59	8.41	1.76	15.17
Q4	5.11	20.28	8.01	1.37	12.76

Source CQMM team calculations

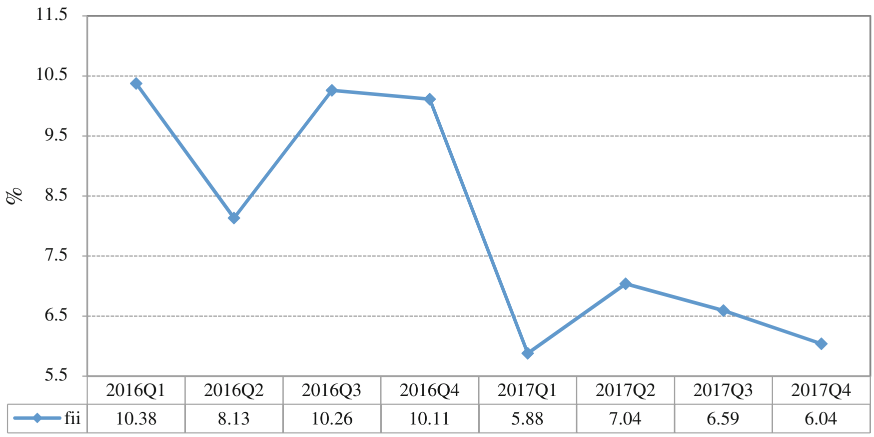
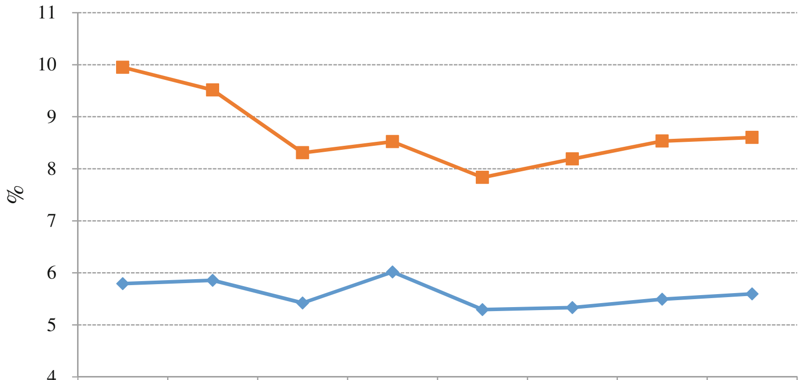


Fig. 2.7 Projected growth rates of FAI.YoY. *Note* fii denotes real FAI growth rates. *Source* CQMM team calculations

2.3.3 Growth Rates of Consumption

The economic downturn drags income growth down, and then curtail consumption growth. The household consumption is expected to edge down in the second half of 2016 and in 2017. The per capita real disposable income of urban households is projected to grow by 5.77% in 2016, down by 0.83 percentage points over 2015, and increase 5.43% in 2017, down further by 0.34 percentage points over 2016. The per capita real cash income of rural residents is expected to go up by 9.06% in 2016, 0.95 percentage points lower than that in 2015, and pick up by 8.29% in 2017, down further by 0.77 percentage points over 2016 (see Fig. 2.8).



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
yd_u_c_pc	5.79	5.86	5.42	6.02	5.30	5.33	5.49	5.60
yc_r_c_pc	9.95	9.52	8.31	8.52	7.83	8.19	8.53	8.60

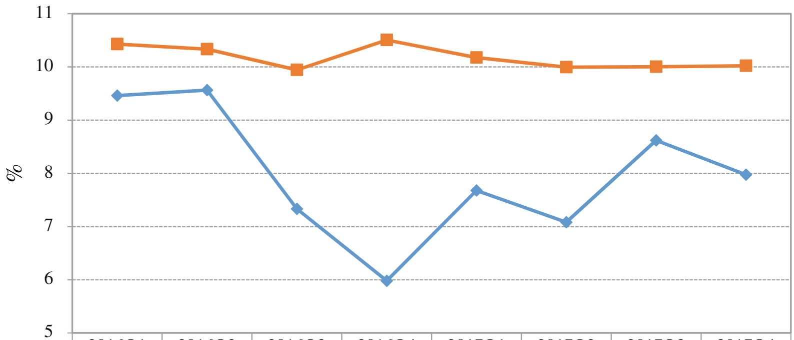
Fig. 2.8 Projected growth rates of income of rural andurban households. YoY. *Note* yd_u_c_pc denotes per capita real disposable income of urban households, yc_r_c_pc denotes per capita real disposable income of rural residents. *Source* CQMM team calculations

Real household consumption is projected to grow by 8.06% in 2016, a decline of 0.04 percentage points over 2015, down further to 7.84% in 2017, 0.22 percentage points lower than that in 2016. Total retail sales of consumer goods at current price is expected to expanded by 10.3%, down slightly by 0.4 percentage points over 2015, and it is projected to fall slightly to 10.05%.

Real household consumption growth in 2016 is expected to appear before high after low tendency, down to 7.33% in the third quarter and 5.98% in the fourth quarter. Slightly fluctuate in 2017, with lowest rate of 7.08% in the third quarter. Growth of total retail sales of consumer goods at current price will stay stable in 2016, with the lowest rate of 9.94% in the third quarter. And it will maintain quite steady, with each quarter is expected to be above 10% (see Fig. 2.9).

In summary, according to the CQMM, China's economic growth is forecast to continue edging down due to decelerating investment growth and week exports growth, while the deflation risks remain low.

1. The GDP growth in 2016 is projected to rise 6.63%, 0.3 percentage points higher than that over 2015. The CPI is expected to climb 2.01%, an increase of 0.57 percentage points over 2015. The PPI is forecast to drop by 3.19%, 2.01 percentage points higher than that in 2015. And the GDP deflator is projected to pick up by 0.79%, an increase of 1.2 percentage points over 2015.
2. The decline in growth of manufacturing investment and private investment has put pressures on total investment growth. The growth of investment in fixed assets (excluding rural households) in 2016 is projected to expand by 9.72%, a drop of 0.47 percentage points over 2015.



	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
CON_D_C	9.46	9.56	7.33	5.98	7.68	7.08	8.62	7.97
RETAIL	10.43	10.33	9.94	10.51	10.18	10.00	10.00	10.02

Fig. 2.9 Projected growth rates of consumption. YoY. *Note* CON_D_C denotes real household consumption growth rate; RETAIL denotes real growth rate of total retail sales of consumer goods. *Source* CQMM team calculations

3. The growth of per capita real disposable income of households is expected to edge down, suggesting that the household consumption is expected to slow down. The total retail sales of consumer goods in 2016 are forecast to go up by 10.3%, a decline of 0.4 percentage points over 2015.
4. Both the result of UK referendum and the lower-than-expected US GDP growth rate in the second quarter imply that the materialization of an important downside risk for advanced economies. The total value of exports in dollar terms in 2016 is expected to fall by 6.01%, down by 3.79 percentage points over 2015. The total value of imports is projected to decline by 14.12%, slightly up by 0.27 percentage points over 2015.
5. Owing to RMB depreciation expectations arising from economic slowdown and pressures put by capital outflows, China is projected to continue depleting its foreign exchange reserves to stabilize RMB. Foreign exchange reserves at the end of 2016 would fall to 2.98 trillion dollars.

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