

ARAB POTASH COMPANY



البوتاس العربية
Arab Potash

ifc

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List of Acronyms:

APOT	Arab Potash Company
HKJ	Hashemite Kingdome of Jordan
ASE	Amman Stock Exchange
MT	Metric Tones
MENA	Middle East & North Africa
SWOT	Strengths ,Weakness ,Opportunities & Threats
GM	Gross Margin
NP	Net Profit
EBIT	Earnings Before Interest & Tax
NOPAT	Net Operating profit After Tax
FCF	Free Cash Flow
NOC	Net Operating Capital
NWC	Net Working Capital
WACC	Weighted Average Cost of Capital
GDP	Gross Domestic Product
ROA	Return On Assets
ROE	Return On Equity
AR	Account Receivable
AP	Account Payable
EPS	Earning Per Share

1- Investment Summary :

- **Company Information :**

The Arab Potash company is a public shareholder company, which was established in the HKJ in the year 1956 as Joint Arab Project, Operate under the privilege from the government of Jordan granting it an exclusive right to extract, manufacturing and marketing minerals from the Dead Sea until 2058.

In addition to the company activities in the extraction and manufacturing of potash the company invests in many transformation manufacturing & supplementary industries related to minerals of the Dead Sea including potassium nitrate, bromine & others.

The Arab Potash Company is among the top 10 producers of potash in the world in the terms of producing volume and the only producer in the Arab world.

The Arab Potash Company traded on ASE under stock symbol **APOT** ISN 141043

The closing price as of Dec. 31.2017 was **16.85 JD**, the company share volume trading during the year 2017 was 3,216,097 JD & the number of shares traded was 175,319 share.

The highest price per share during the year 2017 was **20.89 JD** per share & the lowest price was **16.50 JD**.

The figure below APOT Closing Price during the year 2017

APOT SHARE PRICES 2017

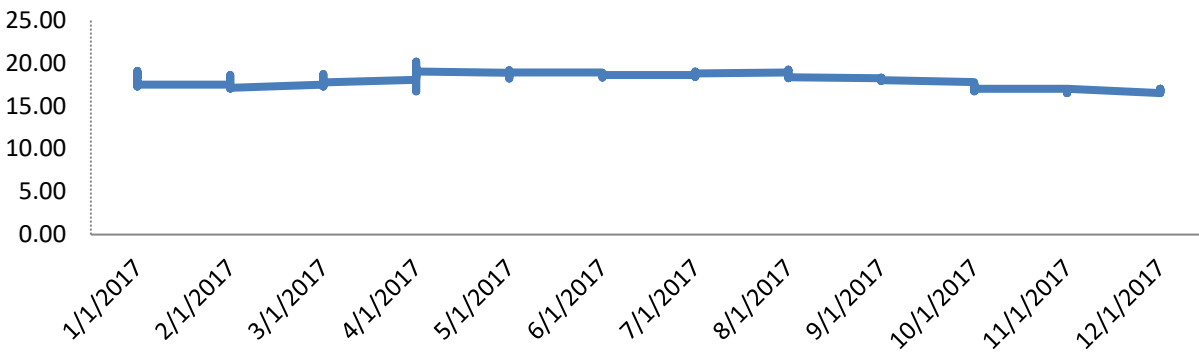


Figure 1: Source: APOT Stock Prices, ASE

The company produces three main products (Standard, Fine & Granular) the production for the year 2017 was for the three types 2,320,000 tones (1.15 million tons of standard, 1.03 million tons of fine & 0.14 million tons of granular)

APOT Production types (Tons)

Type	Qty.	%
Standard	1,145,940	49.39%
Fine	1,031,630	44.47%
Granular	142,430	6.14%

Figure 2: Source: APOT annual report, ASE

The company total sales in 2017 increased by 14.5% compared to the year before 2016 & expected to grow in the long run, also the company gross profit & net profit increased 24.7% & 44.3% respectively.

The high demand in potash was the main reason behind the increase in the company profitability from its core operation , this growth in profitability was not only driven by the high demand on potash , but also due to other factors such as restocking by customer at favorable prices , also the company strategy of relying on natural gas to secure its energy needs instead of using other high cost energy sources such as heavy fuel oil participated in reducing the production cost & increasing the company GM & NP .

2- Industry Analysis & Overview :

- Introduction :

Potash refer to any of various salts contain potassium (**symbol K in the periodic table of elements**), the most common potassium – bearing salts in nature is potassium chloride (**KCl**).

More than 92% of potash produced in the world is used for fertilizer, it's normally require simple separation from salts and other minerals and physical grading into a form suitable for fertilizer manufacturing or farm spreading. An adult human requires normally **2 grams** per day of potassium.

The long term of the industry in the growth prospect are positive because potash is necessary in gradient for providing balanced fertilizer for soils, global demand for food corps will continue to rise in the foreseeable future due to the rising on world population, this coupled with the shrinking agriculture areas due to urban expansion, raises the need for more efficient farms of agriculture, which translated to higher demand for fertilizer, mainly potash.

- **Global Potash Supply :**

The global potash market accounted for USD 18.59 Billion in 2017 and is expected to reach USD 31.8 Billion by 2022, growing of 4.2%.

The grown of this market is mainly driven by the increasing in need for higher productivity using limited land area and a raise in applicability of potash.

The world population is increasing rapidly, a large population will have many consequences, one of which is that much higher amount of food will be needed, but with move people will come future urbanization and less farmland to work with, that means farmers will have to increase corps yield.

About or more than 92% of potash is used in the production of fertilizers, only small amount of 8% of potash production is used in the production of chemicals.

The current world population is 7.7 Billion and world population is expected to reach 8 billion in 2023 and expected to reach 10 Billion in 2055.

The table below indicates the world population up to 2050.

Year	Population (Billions)	Growth
2020	7.79	1.09%
2025	8.18	0.98%
2030	8.55	0.88%
2035	8.89	0.79%
2040	9.21	0.70%
2045	9.50	0.63%
2050	9.77	0.56%

Figure3: Source: World Bank Open Data

Global resources of potash are geographically widespread and widely distributed, and it's about 250 Billion tones but they are notably concentrated in Canada with 27% of world potash reserve, Belarus 20% and Russia 16%.

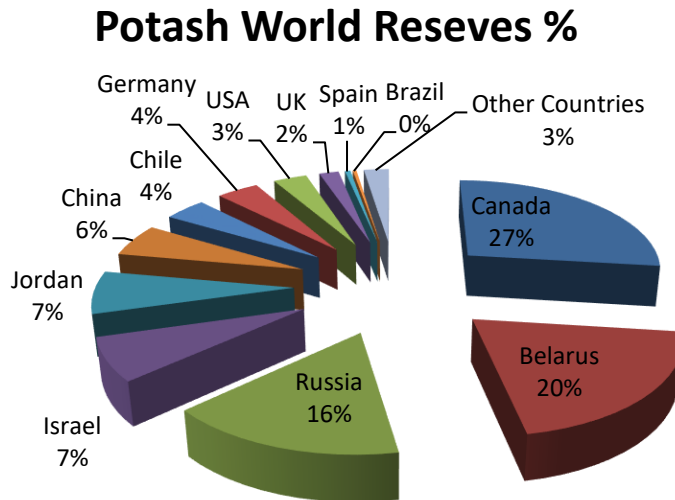


Figure 4: Source: USGS 2016, US Geological Survey

on average almost 34 Million tons of potash extracted each year from 12 countries, a large portion of (60%) of production occurs in just three countries, Canada (30%), Russia (17%) and Belarus (15%) the remain (40%) of production occurs in China (9%), Israel (6%), Jordan (3%), Chile (3%), Germany (9%), Spain (2%), UK (2%), Brazil (1%) And USA (3%).

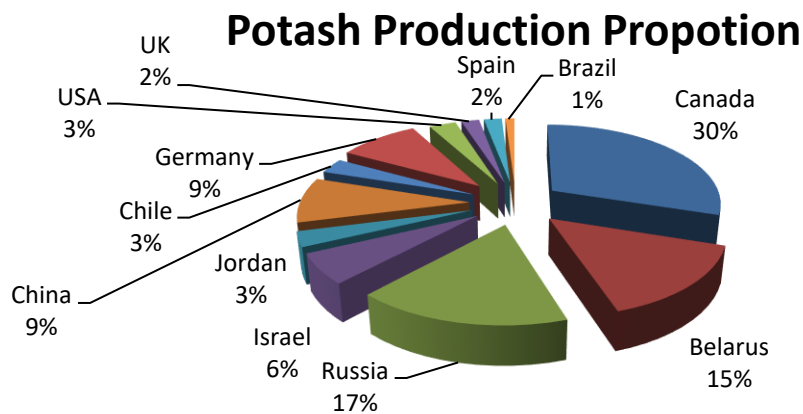


Figure 5: Source: USGS 2016, US Geological Survey

Shown below Global potash capacity which is expected to reach 64.6 Million metric tons by 2022, a large increase from 59.6 Million metric tons in 2017.

Worldwide Potash Producers Production Capacity

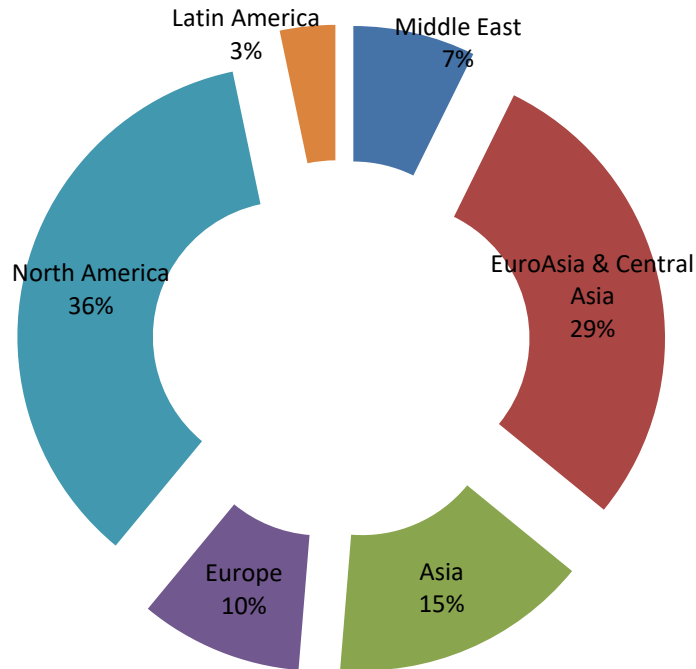


Figure 6: Source: IFA World Potash Capacities 2017, June 2016

In 2017 the volume of potash produced were 64.8 Million tons, World Potash Production in 2017 hit an all-time record. The increase of 2.8 million tons from the previous year was 4.5%. Production in 2017 was also 2.5% more than the previous record year of 2015, the graphs below shows 2017 production volume by country & global potash production share, Canada and the US are the world's largest producers, with production in 2017 for 31% of the world's total production of 64.8 million tons, Canada& US production increase of 6.95% over the previous year, The largest increase in production was in Jordan, which increased by 15% from the previous year, Jordan's share of world production is 4% of the world's total production.

2017 Potash production by country (Million tons):

Country	2017	2016	Growth
Canada & US	20.0	18.7	6.95%
Russia	12.0	10.8	11.11%
Belarus	11.1	10.3	7.77%
Israel, UK & Spain	4.7	5.1	-7.84%
China, Laos & Uzbekistan	9.1	9.0	1.11%
Jordan	2.3	2.0	15.00%
Germany	3.5	3.6	-2.78%
Chile & Brazil	2.1	2.5	-16.00%
	64.8	62	4.52%

Figure 7: Source: IFA World Potash production 2017

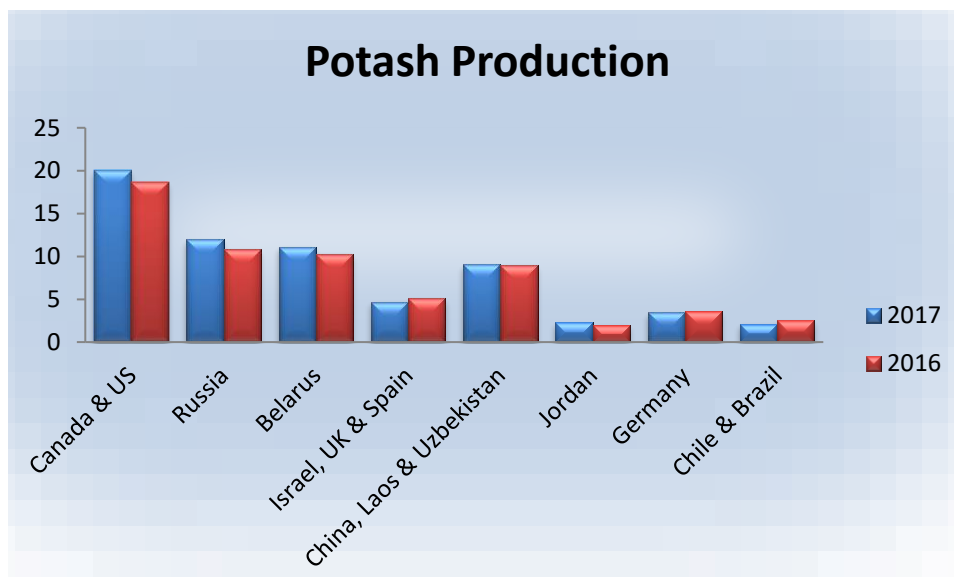


Figure 8: Source: IFA World Potash production 2017

- Global Potash Demand :

The world varies in terms of potential growth of potash. There has been growth in usage in 2017 across most regions except for North America and Europe being mature markets. Africa and The Middle East have seen growth especially in Morocco and Egypt. This trend is set to continue further with downstream production capacities doubling in both countries.

Growth was driven by improved demand as well as some stocking drivers. The need to balance fertilizer use also played an important role in improving Potash demand. The International Fertilizer Association's (IFA) long term compounded annual growth rate for potash is about 2.5% per year for the next 5 years. This would translate into a 73 – 75 million-ton market in 2022.

Global potash deliveries (000 MT)

Region	2017	2016
Asia	31.0	29.0
North America	10.0	10.0
Europe	6.3	6.3
Latin America	12.5	12.0
Middle East & Africa	2.4	2.3
CIS	3.5	3.3
	65.7	62.9

Figure 9: Source: IFA World Potash 2017

Global potash deliveries increased 2.8 Million tons in 2017 compared to the previous year in 2016.

It is expected that growth in potash usage in Asia will continue at a stable pace and the same would apply to Latin America, Russia, and Belarus. There are expectations that Chinese demand for potash will increase in line with dietary changes and usage on fruits and vegetables. Potash is also benefitting from the limits placed on nitrogen usage by the government in an eco-effort to reduce overuse. Potash balances the nutrient usage efficiency and hence Nitrogen utilization. Indian usage of potash has the potential to grow by more than two million tons. Areas in Pakistan, Iran and Central Asia will increase potash usage if and when cultivated areas are increased together with improved agriculture efficiency and upgraded application methods.

Asia represented about 47% of global demand with Latin America growing to about a 19% market share.

A Total of 31 million tons were delivered to Asia, 15.5 million tons delivered to China, or 50% of Total Deliveries to Asia, Indonesia & Malaysia 17% & India 14%.

Global Potash Deliveries by Region

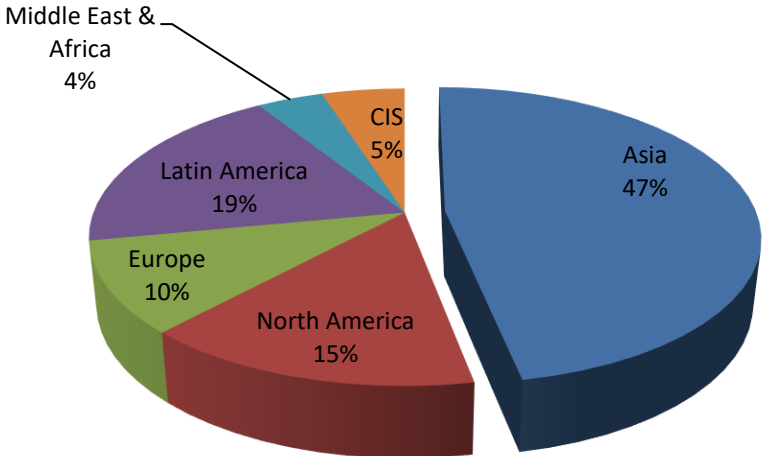


Figure 10: Source: IFA World Potash 2017

- **Global Economy Outlook :**

The last decade has been punctuated by a series of broad-based economic crises and negative shocks starting with the global financial crises of 2008-2009, followed by the European sovereign debt crises of 2010-2012 and the global commodity prices realignments of 2014-2016, as these crises and the persistent head winds that accompanied them subside, the world economy has strengthened, offering greater scope along the economic, social and environmental dimensions of sustainable development.

- **Global Growth :**

In 2017 global GDP growth is estimated to have reach 3.0%, significant acceleration compared to growth just 2.4% in 2016, and the highest rate of global growth recorded since 2011, growth expected to remain steady at 3.0% in 2018 and 2019.

*The main engines of the global economy in the US, emerging Asia and Euro zone, which comprised 60% of the world GDP in 2017 are expected to contribute almost 70% of economic growth in 2017.

* East Asia and Pacific: growth in the region is forecasted to ease from 6.3% in 2018 to 6.1% in 2019.

*European and Central Asia: Growth in the region is projected to moderate to an upwardly revised 3.2% in 2018 and edge down 3.1% in 2019.

*Latin America and Caribbean: growth in the region is projected to accelerate to downwardly revised 1.7% in 2018 and 2.3% in 2019.

*Middle East and North Africa (MENA): growth in the region is projected strengthen to 3% in 2018 and 3.3% in 2019.

*South Asia: growth in the region is projected to strengthen to 3.1% in 2018 and to 7.1% in 2019.

*Sub-Saharan Africa: growth in the region is projected to 3.1% in 2018 and 3.5% in 2019.

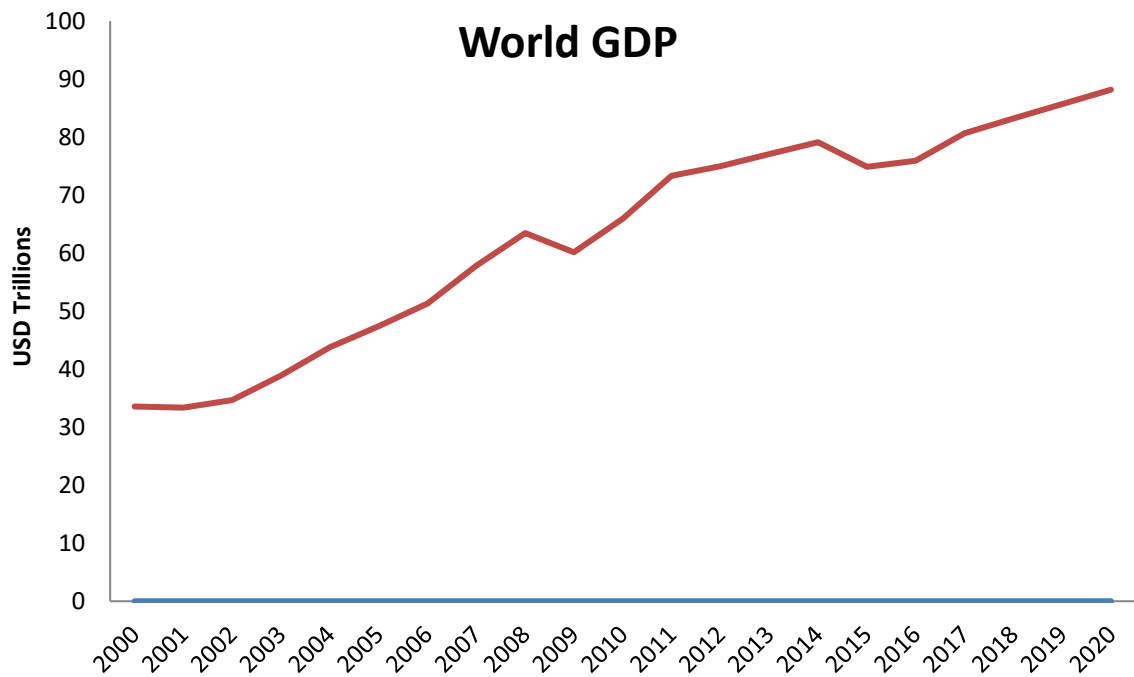


Figure 11: Source: *Data Bank*, World Development Indicators, World Bank

- **Global Potash Growth :**

There has been growth in usage of potash in 2017 across most regions except North America and Europe being nature market, Africa and Middle East have seen growth, it's expected that growth in potash usage in Asia will continue at stable pace and the same would apply to Latin America, Russia and Belarus.

In Europe and Africa no major changes are expected in the medium term for potash demand, some changes in import pattern may emerge as new production in Russia comes on stream later in 2018.

- **Global Potash Market:**

• **Exports**

The total world value of potash exported in 2017 was USD 10.68 billion which increased by 9.7% from the year 2016 which was USD 9.74 Billion, the table below shows the total value of potash exported 2013-2017(000 USD)

Exporters	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016	Exported value in 2017
World	13,389,319	13,240,591	14,061,482	9,736,350	10,682,195
Canada	5,679,705	4,726,516	5,367,676	3,545,974	3,922,594
Russia	2,189,749	2,700,845	2,958,123	1,856,111	2,128,500
Belarus	2,052,365	2,668,861	2,674,325	2,020,033	1,967,344
USA	1,099,047	930,849	855,561	477,056	818,702
Jordan	604,743	602,463	620,058	433,674	472,600
Chile	489,706	450,115	406,103	363,786	299,860
Israel	3,582	4,479	4,053	3,371	1,502
Free Zones	2,208	2683	2461	784	190

Figure 12: Source: Trade statistics for international business development, TRADE MAP,ITC

The total quantity exported in 2017 was 46.4 million tons which increased by 19.64% from the year before in 2016 of 33.78 million tons.

The annual growth in value between the years 2013-2017 was negative (-7%) while the annual growth in quantity was 5%.

The table below shows the value & quantity exported from the major exporter and the share of each country in world exports during the year 2017.

Exporters	Value exported in 2017 (USD thousand)	Quantity exported in 2017	Unit value (USD/unit)	Annual growth in value between 2013-2017 (%)	Annual growth in quantity between 2013-2017 (%)	Annual growth in value between 2016-2017 (%)	Share in world exports (%)
World	10,682,195	46,400,352	230	-7	5	15	100
Canada	3,922,594	19,127,122	205	-10	3	11	36.7
Russia	2,128,500	11,032,972	193	-4	11	15	19.9
Belarus	1,967,341	8,016,546	245	-3	10	32	18.4
USA	818,702	3,373,454	243	-12	2	72	7.7
Jordan	472,600	2,342,958	202	-8		9	4.4
Chile	299,860	1,303,851	230	-11	-1	-18	2.8
Israel	1,502	2,868	524	-18	-33	-55	0
Free Zones	190	422	450	-45	-37	-76	0

Figure 13: Source: Trade statistics for international business development, TRADE MAP, ITC

- **Imports:**

The total world value of potash imported in 2017 was USD 13.98 Billion which increased by 11.25% from the year before in 2016 which was USD 12.56 Billion, the quantity imported in 2017 was 56.34 million tons which increased by 21.03% from the year before in 2016 which was 46.58 Million tons.

The annual growth in value between the years 2013-2017 was (-8%) while the annual growth in quantity for the same period was 5%, the table below shows the total value of potash imported 2013-2017

Importers	Value imported in 2017 (USD thousand)	Quantity imported in 2017	Quantity Unit	Unit value (USD/unit)	Annual growth in value between 2013-2017 (%)	Annual growth in quantity between 2013-2017 (%)	Annual growth in value between 2016-2017 (%)	Share in world imports (%)	Average tariff (estimated) applied by the country (%)
World	13,971,444	-	Tons		-8	5	15	100	
USA	2,612,392	12,550,236	Tons	208	-10	7	37	18.7	0
Brazil	2,438,115	9,865,559	Tons	247	-10	3	20	17.5	0.1
China	1,763,863	7,766,553	Tons	227	-10	3	0	12.6	3.1
India	1,079,706	4,570,290	Tons	236	-6	7	6	7.7	6.1
Indonesia	804,720	3,365,446	Tons	239	-6	7	14	5.8	0.1
Malaysia	447,171	1,800,462	Tons	248	-11	2	-2	3.2	0
Belgium	432,354	1,631,449	Tons	265	-9	13	16	3.1	0
Poland	244,223	974,000	Tons	251	-8	4	-3	1.7	0
Viet Nam	120,628	584,092	Tons	207	0	14	-5	0.9	0
Bangladesh	115,226	574,182	Tons	201	14	16	60	0.8	0

Figure 14: Source: Trade statistics for international business development, TRADE MAP,ITC

The top 10 importers contribute with 72% of 2017 total world imports value in 2017, USA (18.7%), Brazil (17.5%), China (12.6%), India (7.7%), Indonesia (5.8%), Malaysia (3.2%), Belgium (3.1%), Poland (1.7%), Viet Nam (0.9%) and Bangladesh (0.8%), Asia is the largest Importer with 31% of total top 10 importers.

Share in value by Region

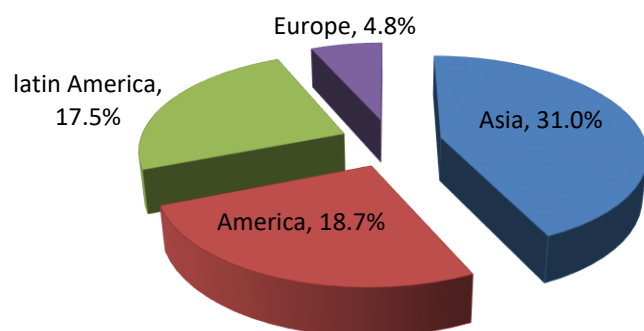


Figure 15: Source: Trade statistics for international business development, TRADE MAP,ITC

Shown below figures of top 10 importers share in value & share in value by region.

Importers	Share in value in world's imports, % in 2013	Share in value in world's imports, % in 2014	Share in value in world's imports, % in 2015	Share in value in world's imports, % in 2016	Share in value in world's imports, % in 2017
USA	18.7%	17.7%	19.6%	15.1%	18.7%
Brazil	17.9%	16.7%	14.7%	16.2%	17.5%
China	13.0%	14.6%	17.4%	14.0%	12.6%
India	6.8%	8.1%	7.2%	8.1%	7.7%
Indonesia	5.3%	5.2%	5.4%	5.6%	5.8%
Malaysia	3.6%	3.6%	3.0%	3.6%	3.2%
Belgium	3.3%	2.6%	2.6%	3.0%	3.1%
Poland	1.7%	1.8%	1.5%	2.0%	1.7%
Viet Nam	2.4%	1.9%	1.9%	2.4%	0.9%
Bangladesh	1.0%	0.0%	1.5%	1.2%	0.8%

Figure 16: Source: Trade statistics for international business development, TRADE MAP,ITC

Top 10 Importers Share Value 2013-2017

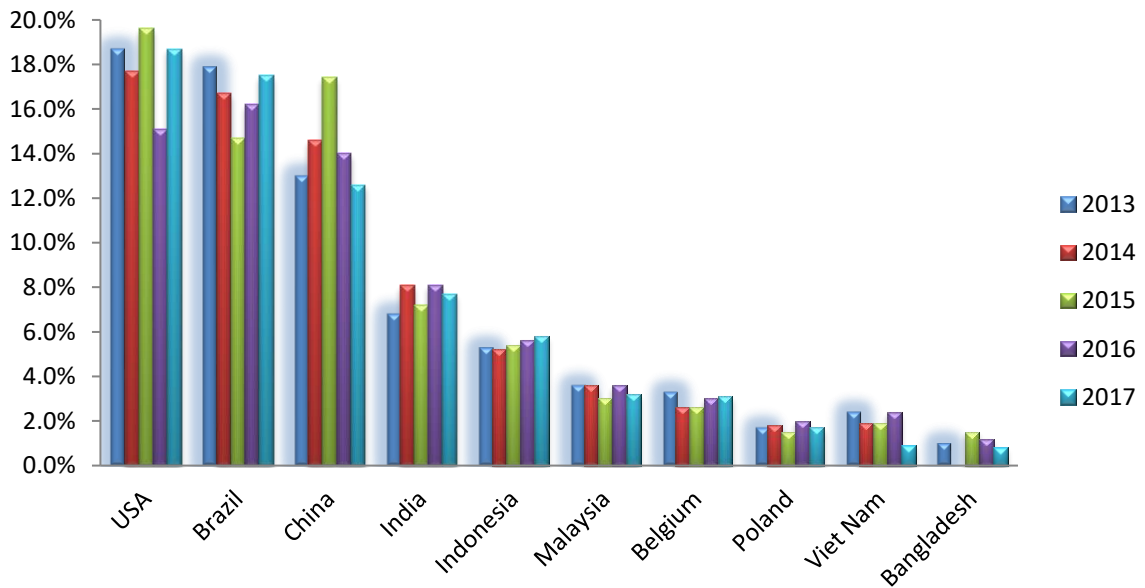


Figure 17: Source: Trade statistics for international business development, TRADE MAP,ITC

- **Potash Price Forecast:**

The static below shows the price of potash from 2014-2017 including the projected prices until 2030, according to the World Bank commodities price forecast it expected the price per metric ton of potash will increase to USD 224 per/MT in 2018 from USD 218 per/MT in 2017, and it's expected that the price per MT to reach USD 268 in 2030.

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030
260	306	282	218	224	227	230	234	238	241	245	249	268

Potash Price 2014-2030

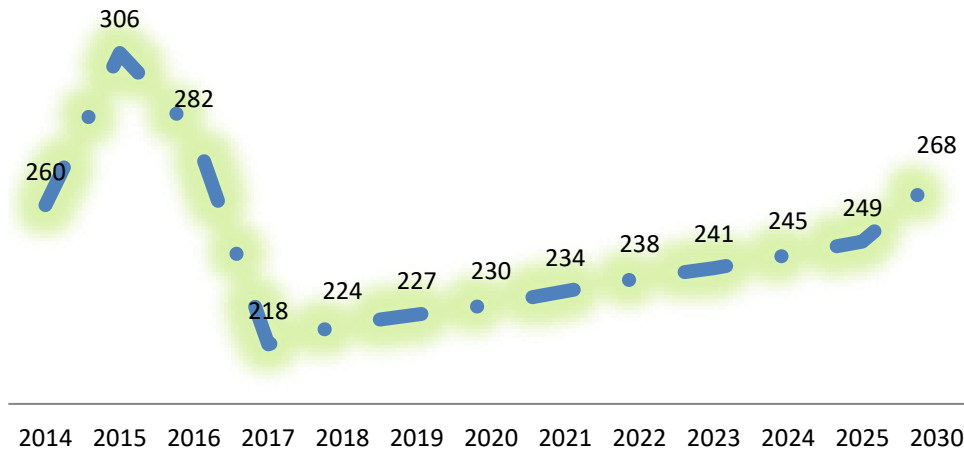


Figure 18: Source: World Bank Commodities Price, World Bank

- **Regional Outlook:**

Growth in Middle East & North Africa (MENA) Region is projected to pick up to 3% in 2018 and 3.3% in 2019, the MENA region makes up about USD 3.3 Trillion in world GDP every year which is 4.5% of world GDP, according to US geological survey 2014 MENA region contributed to the world potash supply with 8.3%, Jordan & Israel extracting potash from the water of Dead Sea, the two countries were responsible for 8.3% of world production.

- **Jordanian Potash Market:**

In Jordan, there is one company that extracts potash, it's The Arab Potash Company, the reason of this dominance that the government of Jordan granted the Arab Potash Company an exclusive right to extract, manufacturing and marketing minerals from the Dead Sea until 2058, the Jordanian exports represent 4.3% of world potash exports, Jordan ranking in the world potash export volume is 5.

3- The Arab Potash Overview :

Arab Potash Company (APOT) is the eighth largest potash producer worldwide by volume of production and the sole producer of potash in the Arab World. It also has one of the best track records among Jordanian corporations in the areas of work safety, good governance, sustainable community development, and environmental conservation. Established in 1956 in the Hashemite Kingdom of Jordan as a Pan Arab venture, APOT operates under a concession from the Government of Jordan that grants it exclusive rights to extract, manufacture, and market minerals from the Dead Sea until 2058. In addition to its potash operations, APOT also invests in several downstream and complementary industries related to Dead Sea salts and minerals, including potassium nitrate, bromine and other derivatives. As a major national institution and economic contributor, APOT employs more than 2,000 workers across its locations in Amman, Aqaba, and Ghor Al Safi

Highlights of APC History

1956 The Arab Potash Company (APOT) was established on 7th July as a pan-Arab public shareholding company to extract potash from Dead Sea minerals.

1958 The Government of the Hashemite Kingdom of Jordan grants APOT exclusive rights to extract manufacture and market minerals from the Dead Sea until 2058

1976 The project began with tests and experiments to determine the parameters of various technologies and ideas

1979 Construction work started on the project and was completed in 1982. A major engineering challenge was to build the dykes on the unstable sea bed. Sixteen million cubic meters of earth material were

displaced in the process of building about (117) kilometers of seepage proof dykes eight meters wide at the top. More dykes were added later.

1983 APOT began production at an initial total capacity of 1.2 million metric tons of product. Production capacity was later optimized to reach 1.4 million tons at the end of the eighties.

1988 APOT posted its first profit and began plans to diversify production by studying Bromine and downstream products.

1994 Construction of a second plant of a 0.4 million ton capacity at a cost of US \$120 million brought up total production capacity to 1.8 million tons.

1997-99 Joint Venture Agreements and construction of Bromine and derivatives Plants and Potassium Nitrate, Magnesia and Salt were concluded. APC invested about US \$500 million in the downstream. It signed JV agreements with Albemarle of The United States for the Bromine Complex and Kemira of Finland for the Potassium Nitrate Complex in Aqaba.

2003 PotashCorp (Potash Corporation of Saskatchewan) bought 28% of APOT shares from the Government of Jordan. Sales surpassed 2 million tons for the first time.

2004 Construction began on the second Cold crystallization unit with an investment of USD \$450 million aiming to bring capacity to over 2.4 million tons. APOT opened its first overseas sales office in Kuala Lumpur-Malaysia.

2007 APC became 100% owner of Kemapco after buying Kemira of Finland's shares in the Company which produces 120K of the high value nutrient (potassium Nitrate)

2008 Mining royalties rose from JD 15 per ton to JD 125 per ton, with a ceiling of 25% of net profits. This makes APOT's royalties the highest of all potash producers in the world. APC consolidated sales approached \$0.8 billion dollars. Profits soared to \$500 million dollars. APOT production surpassed the 2 million tons mark for the first time.

2009 Rent for concessionary land rose from JD 200,000 per annum to JD 1,500,000 per annum. APOT began shipping in Bulk containers.

2010 The new Cold Crystallization plant was inaugurated by HM the King and APC reached an official potash production capacity of 2.4 million tons. As part of the expansion, The Aqaba Warehouse became the largest Potash Export terminal in the world with a capacity of 300,000MT.

2011 Agreement with the Jordan Valley Authority (JVA) was amended to raise APOT's water tariff by JD 3.5 million per annum. APOT sales and production hit records surpassing 2.2 million tons while consolidated sales registered 900 million dollars.

In 2011, APOT production costs became one of the world's highest costs of production per ton in the world.

2012 Electricity tariff was raised by 150%, which raised APC's electricity bill by JD 31.5 million annually. A Collective agreement signed with the unions granting APOT employees benefits that make the APOT remunerations and benefits package one of the best in Jordan. A Joint Venture was set up with JPMC forming the Jordan Industrial Ports

Company which will manage, revamp and expand the export facilities at Aqaba.

2013 The electricity tariff was further raised by 7.5% annually in the period 2013-2017. APC opened its second overseas Office in New Delhi-India.

2014 An agreement was signed between APOT, the Ministry of water and Irrigation, and JVA whereby APOT would finance completely the construction of a dam in Wadi Ibn Hammad to the value of JD 26 million. Construction work is expected to take 3-4 years, following which 4 million cubic meters of rain water would be harvested to provide local communities with drinking water and to address some of APOT's water needs.

A 15-year agreement was signed on 19th February between APOT and Jordan Bromine Company (JBC) with Nobel Energy of Houston Texas to import natural gas from fields in international waters in the Mediterranean. Supplies are expected to start arriving in 2016. The deal is expected to produce total energy cost savings for APC of JD 235 million, or an average of JD 11 per ton of potash produced

The table below shows APOT major shareholders as of 31 Dec, 2017

Shareholder	No, of Share	Share Percentage
PCS Jordan LLC	23,294,614	28%
Shareholding Management Company- Government of Jordan	21,782,437	26%
Arab Mining Company	16,655,651	20%
Social Security Corporation	8,642,968	10%
Iraqi government	3,920,707	5%
Libyan company for foreign Investments	3,386,250	4%
Kuwait Investments Authority	3,286,095	4%
Private sector	1,730,035	2%
Ministry of Finance	618,743	1%
Total Company Shares	83,317,500	

Figure 19: Source: APOT Annual report 2017, ASE

- **Subsidiaries:**

- **Arab Fertilizer & Chemicals Industries (KEMAPCO):** company wholly-owned by APOT with capital of USD 42 Million.
- **Numira Mixed Salts & Mud Company:** APOT owns 100% of Numira's share with capital of JD 1.4 Million as limited Liability Company.
- **Jordan Dead Sea industries Company (JODICO):** JODICO wholly-owned by APOT with capital of JD 100,000 as Private Liability Company.

- **Affiliates:**

- **Jordan Bromine Company (JBC):** APOT shares 50% ownership of JBC, the company capital JD 30 Million.
- **Nippon-Jordan fertilizer Company (NJFC):** NJFC Capital JD 16.7 Million is held by APOT 20% JMBC 70% Mitsubishi Corporation 10%
- **Jordan Industries Ports Company (JIPC):** JIPC capital is JD 1 Million shared equally between APOT & Jordan Phosphate Mines Company (JPMC).

- **APOT 2017 Sales :**

APOT sales in 2017 increased by 16% over the year before in 2016, APOT sales were 2.36 Million tons in 2017 & 2.03 Million tons in 2016.

APOT's sales are concentrated in Asia, representing about 63% of the company's sales value, 40% to India and China and 23% to the Far East (Indonesia and Malaysia). APOT's sales to India and China grew by 3% over the previous year, while sales to the Far East grew by 30%; Europe representing 13% of the company's sales and grew by 36% from 2016.

The figures below showing APOT sales to the top markets

Importers	Sales Value in 2017 (JOD thousand)	Sales Value in 2016 (JOD thousand)	Growth in Sales value between 2016-2017 (%)
China & India	168,038	163,117	3%
Far East	96,815	74,475	30%
MENA	35,959	35,145	2%
Africa	51,069	47,918	7%
Europe	52,914	38,988	36%
USA	17,815	9,846	81%
Canada	667	162	312%
Total	423,277	369,651	

Figure 20: Source: APOT Annual report 2017, ASE

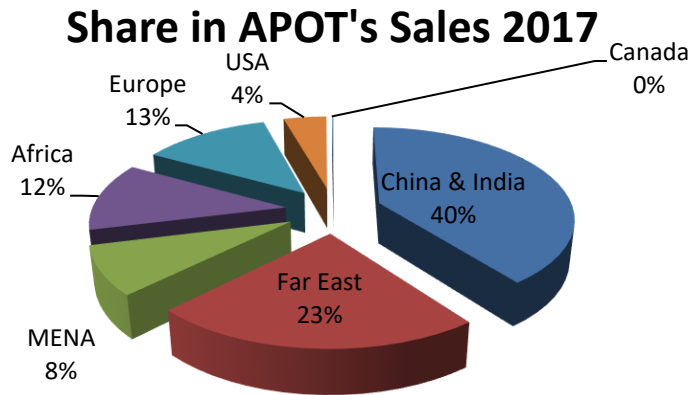


Figure 21: Source: APOT Annual report 2017, ASE

APOT sales volumes in 2017 were also at an all-time record registering 2.36 million tons and increasing 16% over the previous year. Notably, sales to Indonesia increased by 180% in 2017 due to new marketing arrangements and sales to private and government fertilizer channels. The sales patterns to India and China were in line with the Long-Term Agreements in both markets and are expected to follow the same lines in the near future. The growth of sales in the local and regional markets was about 13%.

Importers	Quantity Sold in 2017	Quantity Sold in 2016	Share in APOT's Quantity Sold 2017 (%)	Growth in Quantity Sold between 2016-2017 (%)
India	511,759	498,089	22%	3%
China	616,551	553,574	26%	11%
Indonesia	294,049	104,806	12%	181%
Egypt	164,016	136,000	7%	21%
Malaysia	206,004	242,551	9%	-15%
South Africa	61,401	68,185	3%	-10%
Mozambique	39,479	28,512	2%	38%
Pakistan	32,311	41,065	1%	-21%
Saudi Arabia	46,472	-	2%	100%
Taipei, Chinese	-	26,000	0%	-100%
Total Top Market	1,972,042	1,698,782	84%	16%
World	2,360,244	2,030,202		

Figure 22: Source: APOT Annual report 2017, ASE

APOT Qty. Sold

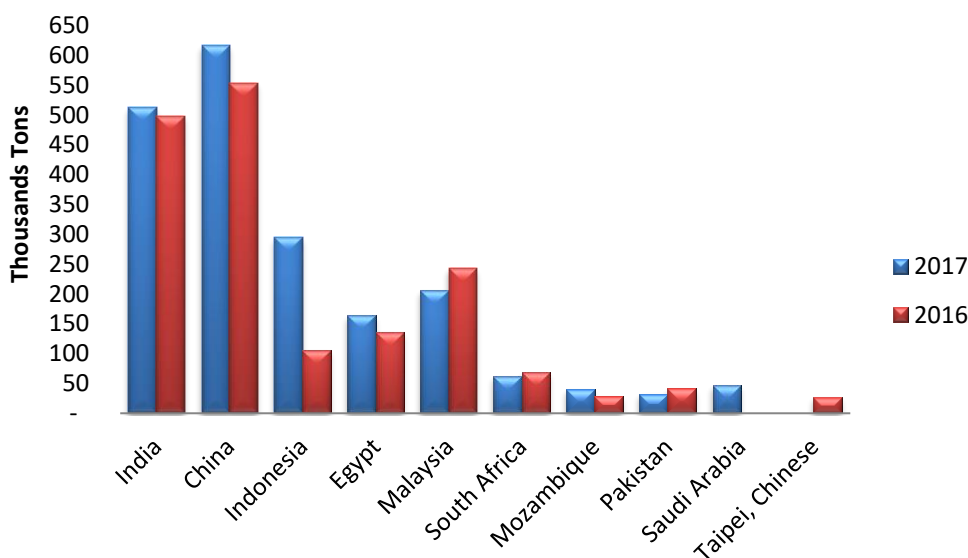


Figure 23: Source: APOT Annual report 2017, ASE

- **Business Plane:**

Jordan has an estimated potash reserve of 270 Million tons which represents 7% of the world total reserves, APOT in 2017 produced 2.36 Million tons it's about 4% of total world production.

APOT is one of the Jordanian biggest exporter, one of the largest earner of foreign currencies and one of the largest providers of work opportunities in the private sector, it's paid annually 60% of it's profit to the treasury in the form of corporate tax, profit dividends, royalties, rent of land and port fees, in 2017 APOT contributed with 2% in GDP.

The company has short, medium and long term strategies in place to maintain the continuity of the company, and to allow it to grow with the global demand for potash, the short & medium term plans focus on cost reduction due to competitors pressure and shrinking profitability for potash operations.

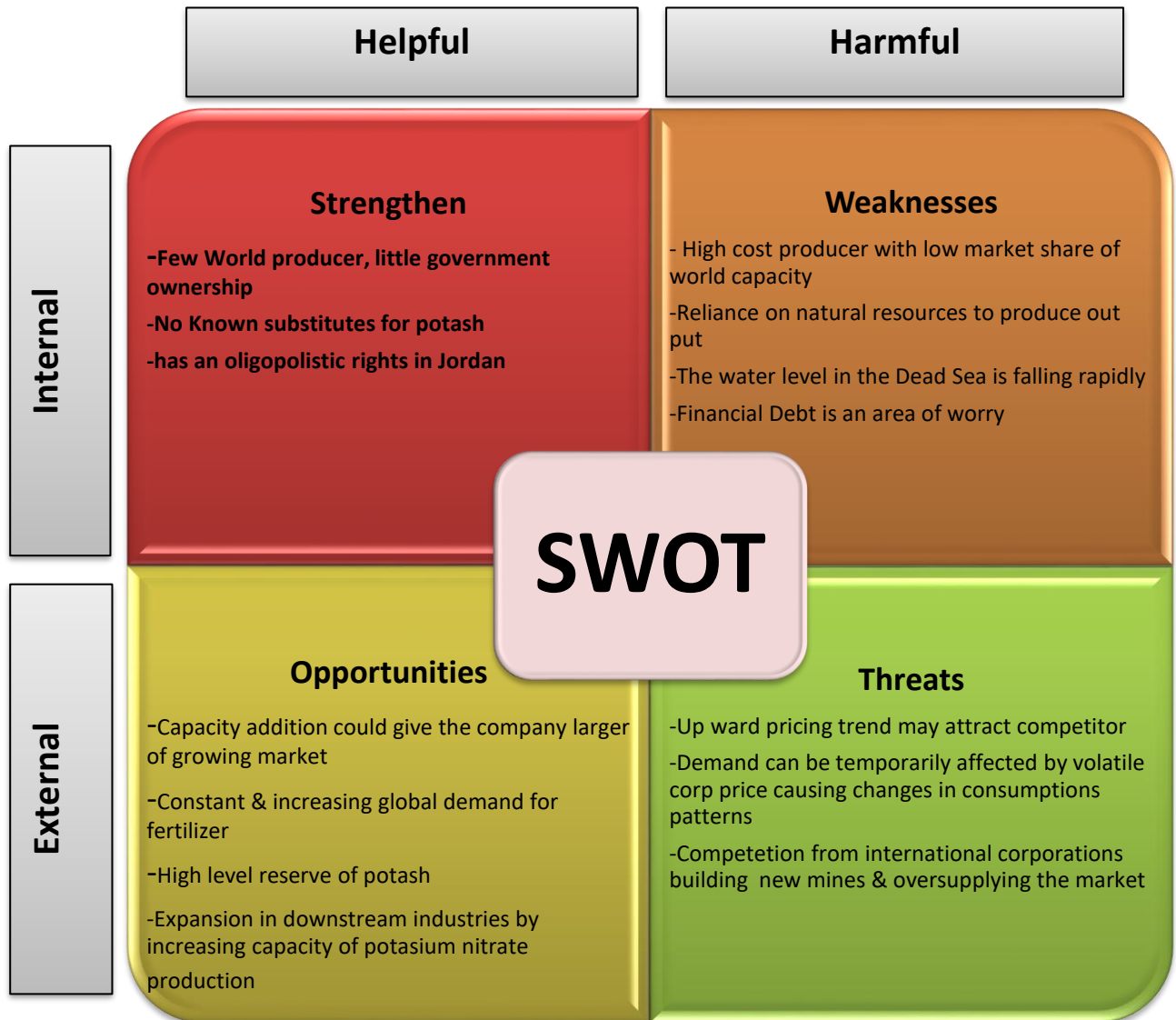
- 1- Safety:** the company continues to consider safety as its top priority, currently it's focus is in developing an injury free work culture & investing in a safer work place.
- 2- Diversifying Energy Resources:** Currently the company relies on natural gas to secure its energy needs instead of using other high cost energy source such as heavy fuel oil, the construction of the gas pipeline to the company's plants in Ghor AlSafi has been completed in 2017, this has brought significant savings to the company and should result in maximizing the profit and maintaining the continuity of the company's operations.
- 3- Electricity cost:** in order to reduce the production cost the company started the process of installing a new gas turbine, this turbine will generate electricity and steam by burning either natural gas or diesel.
- 4- Water resources:** the company has contributed JD 26 Million to **Wadi Ibn Hammad** project which has a capacity of 4 Million cubic meters, the company started benefiting from Wadi Ibn Hammad Dam project as of the end of 2017, the company also has signed an agreement to finance the

construction of **Wadat** Dam & it's expected that the construction cost of the Dam will reach JD 4 Million and expected to complete in two years.

5- Production : APOT completed expansion project to increase the production capacity of Granular potash from 250 Thousand tons per year to 500 Thousand tons per year, the company signed an agreement with **HIDROCONSTRUCTIA S.A Company – Romania** to rebuild two dams at the company concession area, this project should increase production capacity by 180 Thousand tons annually.

6- Downstream Industries: Amemorandum of Understanding signed between **APOT & Yara International – Norway** to increase the production capacity of **Arab Fertilizer & Chemicals Company (KEMAPCO)** which produces potassium Nitrate (SOP) by 175 Thousand tons to 350 Thousand tons annually.

4-SWOT Analysis:



5-PESTLE Analysis:

A **PESTLE** analysis is a method for reviewing the macro environment, External forces that affect a company ability to plan, its stand for:

Political, Economic, Social, Technological, Legal, Environmental

These Forces although out of the company's control, may have an impact on the success of any future plan, by considering them, a company can change direction, build contingences, identify new opportunities or do nothing at all, it's an important part in the strategic decision making.



6-Financial Analysis:

In determining the fair value of APOT, several factors had to be taken into consideration including the expected growth in revenue of the company, As a company involved in the production and sale of a globally priced commodity and in addition to the high reliance on the future growth in demand and the future increase in the price, we based on our valuation on **Cash Flow Method**.

This valuation was made based on historical data and other indicators to prepare pro forma financial statements for the period 2018-2022.

- Ratio Analysis :

There are several hundred possible ratios that can be used for analysis purposes, but only a small core group is typically used to gain an understanding of the company, these ratios include:

- **Liquidity Ratio:** these ratios seek to determine the ability of the company to avoid financial stress in the short run, the two most important ratios are

1- Current Ratio: this ratio measure the company ability to meet its short term obligation from its short term assets its calculated by **Current Assets / Current Liability**

APOT current ratio is **7.92** which is above the ideal value **2.0** & above the industry average **7.24**, the company current ratio decreased by **0.21** time from 2016 that was because of the decrease of cash balance, the ratio expected to decrease to **5.8-6.16** for the projection period.

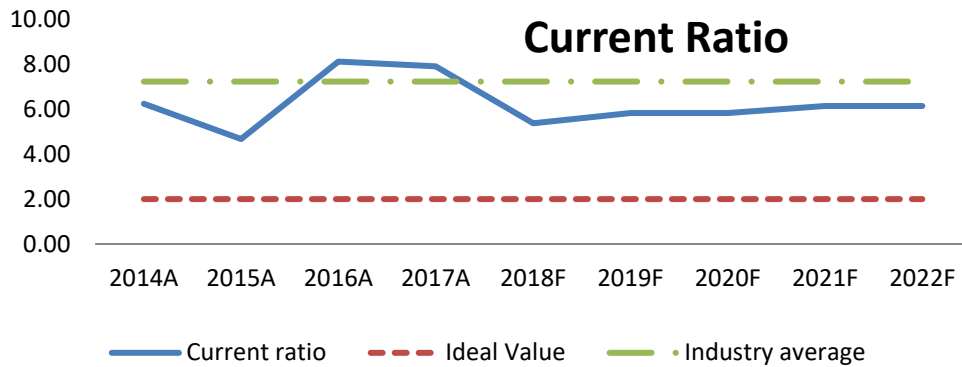


Figure 24: Source: APOT Annual report 2017, ASE

2- Quick Ratio: this ratio measure the ability of the company to meet its obligation relying solely on more liquid current assets this ratio calculated by:
(Cash + Marketable securities + AR) / Current Liabilities

APOT Quick ratio was **6.22** that are above the ideal value **1.0** and above the industry average **5.81**.

APOT current ratio is above the industry **1.09%** & the quick ratio above the industry average of **1.07%**, we can say that APOT have excess cash or unused cash balance, the company may use this cash on short-term investments and generate extra profit to the company.

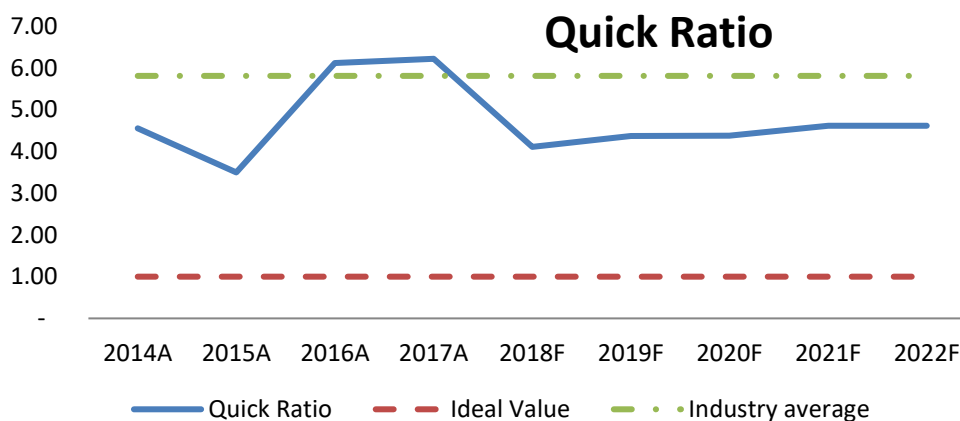


Figure 25: Source: APOT Annual report 2017, ASE

- **Profitability Ratio:** measure the company success in generating income

APOT GM & ROE & ROA are positive for the years from 2014-2017 & expected to stay within the range, that is mean APOT is able to generate income from its assets efficiency & effectively but lower than the industry average.

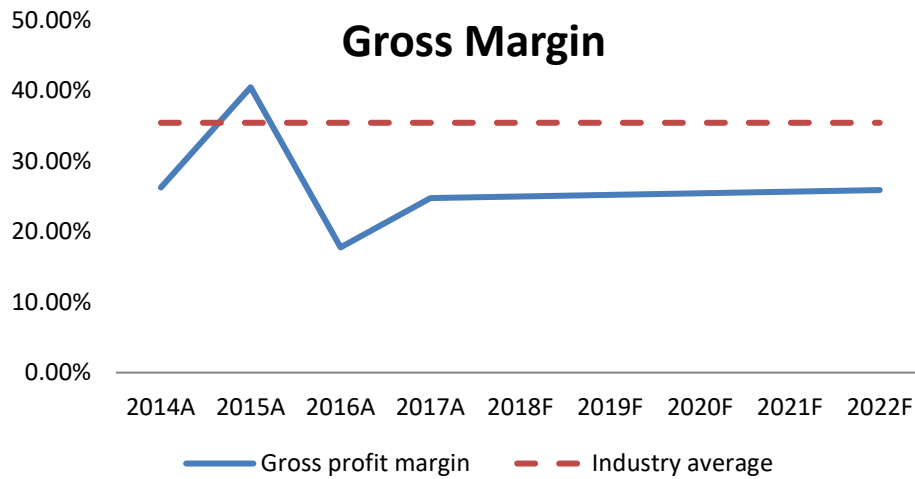


Figure 26: Source: APOT Annual report 2017, ASE

- **Assets Management Ratios:**

APOT ACP (Average Collection Period) was **45.7** days in 2017 that is lower than the industry average of **45** days, this means that the company collects the receivables on time; Account receivable turnover was **7.87** that are lower than the industry average by **9%** of **8.65**.

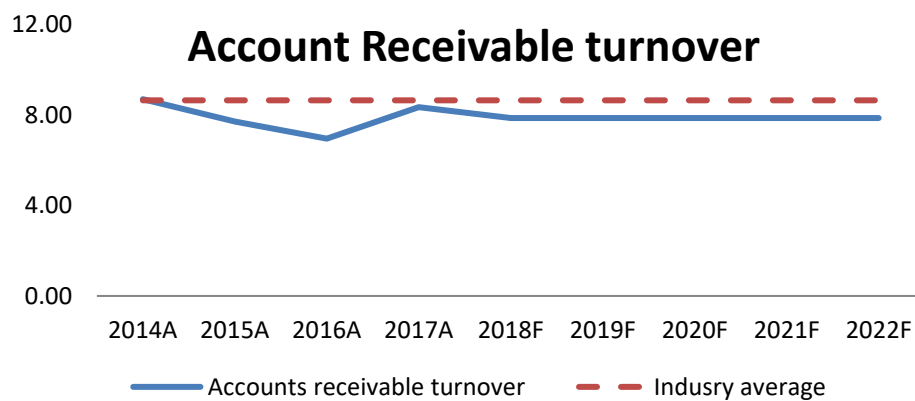


Figure 27: Source: APOT Annual report 2017, ASE

The table below shows APOT historical & forecasted ratios (2014-2017)

Financial Ratios		2014A	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Liquidity Ratios (company strength)										
	Current ratio	6.25	4.68	8.13	7.92	5.38	5.84	5.84	6.16	6.16
	Ideal Value	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	Industry average	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24
	Quick Ratio	4.55	3.50	6.12	6.22	4.11	4.37	4.38	4.62	4.62
	Ideal Value	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Industry average	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81
	working capital	410,559	428,014	358,476	358,315	353,675	369,568	377,250	389,072	397,073
Profitability Ratios										
	Gross profit margin	26.24%	40.46%	17.76%	24.75%	24.97%	25.19%	25.41%	25.63%	25.86%
	Profit margin on sales	18.61%	24.86%	16.84%	21.23%	20.47%	20.53%	20.59%	20.65%	20.70%
	Return on assets	10.51%	12.80%	6.79%	9.59%	9.11%	9.14%	9.19%	9.23%	9.27%
	Return on equity	11.58%	15.52%	7.73%	11.12%	10.81%	10.97%	11.10%	11.21%	11.29%
	EPS	1.20	1.57	0.75	1.08	1.06	1.09	1.11	1.14	1.17
	Dividends per share	1.50	1.20	1.20	1.00	1.00	1.00	1.00	1.00	1.00
	Payout ratio	125%	76%	161%	93%	94%	92%	90%	88%	86%
Asset Management Ratios										
	Days sales outstanding	42.0	47.4	52.5	43.7	46.4	46.4	46.4	46.4	46.4
	Accounts receivable turnover	8.70	7.71	6.96	8.35	7.87	7.87	7.87	7.87	7.87
	Inventory turnover	22.04	9.99	14.53	27.74	15.97	15.97	15.97	15.97	15.97
	Days inventory	16.56	36.55	25.12	13.16	22.85	22.85	22.85	22.85	22.85
	Asset turnover	0.56	0.51	0.40	0.45	0.45	0.44	0.45	0.45	0.45
Leverage Ratios										
	Debt ratio	9.22%	17.54%	12.19%	13.81%	15.51%	13.95%	13.65%	13.10%	13.12%
	Debt to equity ratio	10.16%	21.27%	13.88%	16.02%	18.38%	16.74%	16.49%	15.92%	15.98%

Figure 28: Source: APOT Annual report 2017, ASE

7- Company Valuation:

Company valuation means how worthy a company is and it's done by using various ratios, tools and techniques to see whether the company share is **overvalued** or **undervalued**.

While there are many different possible techniques to arrive at the value of company we use the cash flow valuation As a company involved in the production and sale of a globally priced commodity and in addition to the high reliance on the future growth in demand and the future increase in the price & it's the most theoretically correct of all of the valuation methods because it's the most precise.

A- Forecasted Financial statements :

Financial statements was built on growth of sales over the period from 2018-2022 the sales growth was assumed to grow by **2.1%** annually.

B- Free Cash Flow (FCF):

FCF flow have been estimated for the next five years, the figure below shows the FCF

APOP Free Cash Flow Buildup
(JD 000s)

Period	Forecasted									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	
					1	2	3	4	5	
EBIT	110,846	163,433	70,497	113,051	103,853	106,331	108,861	111,444	114,082	
Tax	9.6%	19.5%	3.9%	15.4%	12.1%	12.1%	12.1%	12.1%	12.1%	
Net operating income after tax (NOPAT)	100,256	131,624	67,776	95,641	91,319	93,497	95,722	97,994	100,313	
Change in net working capital (NWC)										
cash	294,759	338,463	254,348	271,321	277,019	278,109	283,950	289,912	296,001	
AR	61,546	68,453	53,141	50,689	54,908	56,061	57,239	58,441	59,668	
Inventories & Spare parts	70,237	73,990	61,433	48,639	62,272	63,394	64,533	65,690	66,866	
AP	28,941	25,535	17,468	15,537	21,143	21,523	21,910	22,303	22,702	
Accrued expenses	11,443	10,497	8,377	9,590	9,355	9,551	9,752	9,957	10,166	
Total Change in NWC	386,158	444,874	343,077	345,522	363,702	366,489	374,059	381,783	389,666	
Net fixed Assets	291,846	241,582	232,078	219,481	224,090	228,796	233,601	238,506	243,515	
Total operating capital	678,004	686,456	575,155	565,003	587,792	595,285	607,660	620,290	633,181	
Net operating capital (NOC)		8,452	(111,301)	(10,152)	22,789	7,494	12,374	12,630	12,891	
NOPAT		131,624	67,776	95,641	91,319	93,497	95,722	97,994	100,313	
FCF		123,172	179,077	105,793	68,530	86,004	83,348	85,364	87,421	

C- Weighted Average Cost of Capital (WACC):

The WACC is the weighted average of cost of company's Debt and the cost of Equity

WACC= Cost of Equity * Weight of Equity +

Cost of Debt (1-Tax)*Weight of Debt

- **Cost of Equity:** we have used the Capital Assets Pricing Model (**CAPM**) to calculate the cost of equity

Cost of Equity= Risk Free Rate (RFR) +Beta (β)*(Market Return-Risk Free Rate)

- **Cost of Debt = Interest / Debt * (1-Tax Rate)**

Based on the assumption below the cost of equity & the cost of debt were:

Cost of Equity		Cost of Debt	
Risk Free Rate (RFR)	7.02%	Cost of Debt	8.75%
Market Return	-0.051%	Tax Rate	12.1%
B	0.05		
Cost of Equity	6.6%	After Tax Cost of Debt	7.69%

Based on these assumptions the **WACC** was **6.65%**

D- Value of Company:

The value of the company was calculated using Gordon Growth Model Based on 1% as constant cash flow growth rate so the company value was as below:

Value of The Company	
<i>Constant cash flow growth rate (LT Growth Rate)</i>	1.00%
<i>WACC</i>	6.65%
<i>Value of Operation at the end of 2017_(JD 000s)</i>	1,561,790
<i>(-) Debt</i>	34
<i>Intrinsic Value of Firm's Equity_(JD 000s)</i>	1,561,756
<i>Number of Share outstanding_(JD 000s)</i>	83,318
<i>Intrinsic value Per Share</i>	<u>18.74</u>

Price for APOT is **JD18.74**. The closing price for APOT as of December 31, 2017 was **JD16.85**. Our Recommendation at the current level is a "Hold." This considered, and in light of the uptrend in the demand and prices of commodities and fertilizers that is expected to hold for the coming 12-24 months, an upside potential for the industry still exists.

E- Sensitivity Analysis:

Sensitivity analysis of share price valuation has been examined and we got the following values.

		WACC				
		5.50%	6.00%	6.65%	7.00%	7.50%
Cash Flow Growth Rate	1.00%	23.55	21.19	18.76	17.66	16.30
	1.50%	26.62	23.67	20.68	19.36	17.75
	2.00%	30.58	26.76	23.02	21.40	19.46
	2.50%	35.85	30.73	25.91	23.90	21.51
	3.00%	43.23	36.02	29.61	27.02	24.02

8- References:

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9- Appendixes:

A- Historical & Pro forma Financial Statements

ARAB POTASH COMPANY – APOT – 141043

INCOME STATEMENT (JD 000S)

	2014A	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
<i>Sales</i>	535,465	527,527	369,651	423,277	432,166	441,241	450,507	459,968	469,627
<i>Cost of sales</i>	(394,958)	(314,114)	(304,016)	(318,522)	(324,268)	(330,107)	(336,039)	(342,065)	(348,187)
Gross Profit	140,507	213,413	65,635	104,755	107,898	111,135	114,469	117,903	121,440
<i>Administrative expenses</i>	(22,579)	(23,964)	(18,011)	(13,989)	(14,451)	(14,929)	(15,422)	(15,932)	(16,459)
<i>Selling & distribution expenses</i>	(18,917)	(20,140)	(17,979)	(19,351)	(20,236)	(21,161)	(22,128)	(23,140)	(24,198)
<i>Social corporation expenses</i>	-	-	(8,118)	(7,850)	(8,015)	(8,183)	(8,355)	(8,530)	(8,710)
<i>Foreign currency exchange differences</i>	(2,270)	(2,100)	(255)	2,111	2,155	2,201	2,247	2,294	2,342
<i>Royalty to the GOV.</i>	(13,330)	(23,698)	(4,063)	(7,339)	(7,493)	(7,650)	(7,811)	(7,975)	(8,143)
<i>Depreciation expenses</i>	(62,749)	(63,527)	(64,669)	(70,259)	(71,734)	(73,241)	(74,779)	(76,349)	(77,953)
Operating profit	83,411	143,511	17,209	58,337	59,858	61,412	62,999	64,619	66,274
<i>Finance revenue</i>	10,948	10,452	8,413	10,854	9,470	9,668	9,872	10,079	10,290
<i>Donation expenses</i>	(7,633)	(10,138)	-	-	-	-	-	-	-
<i>Other income , net</i>	3,338	1,887	16,269	11,489	11,082	11,315	11,552	11,795	12,043
<i>Other expenses</i>	(344)	(430)	-	-	-	-	-	-	-
Profit before tax & gain from associate & joint venture	89,720	145,282	41,891	80,680	80,410	82,395	84,423	86,493	88,607
<i>Groups share of profit of associate & joint venture</i>	21,228	18,471	28,606	32,371	23,443	23,936	24,438	24,951	25,475
<i>Revaluation of Islamic development bank loan Magnesia Co.</i>	(102)	(320)	-	-	-	-	-	-	-
Income before interest & tax	110,846	163,433	70,497	113,051	103,853	106,331	108,861	111,444	114,082
<i>Finance cost & bank charges</i>	(641)	(609)	(5,754)	(6,853)	(3,227)	(3,294)	(3,364)	(3,434)	(3,506)
Income before tax	110,205	162,824	64,743	106,198	100,626	103,036	105,497	108,010	110,576
<i>Income tax expenses</i>	(10,529)	(31,691)	(2,499)	(16,355)	(12,145)	(12,436)	(12,733)	(13,036)	(13,346)
Net Income	99,676	131,133	62,244	89,843	88,481	90,600	92,764	94,974	97,230

BALANCE SHEET (JD 000s)

ASSETS

Non - current assets	2014A	2015A	2016A	2017A	2018F	2019F	2020F	2021F	2022F
Non- current assets									
Property, plant & equipment	291,846	241,582	232,078	219,481	224,090	228,796	233,601	238,506	243,515
Intangible assets	-	-		14,631	14,631	14,631	14,631	14,631	14,631
Project in progress	39,683	68,932	76,088	78,410	78,410	78,410	78,410	78,410	78,410
Investments in associated	104,746	7,370	4,579	5,095	5,202	5,311	5,423	5,537	5,653
Investments in joint venture	-	126,238	135,277	153,466	156,689	159,979	163,339	166,769	170,271
Financial assets at fair value	715	771	660	606	619	632	645	659	672
Finance assets at amortized cost			21,199	21,106	21,549	22,002	22,464	22,936	23,417
Deferred tax assets	3,063	16,508	19,391	15,897	16,231	16,572	16,920	17,275	17,638
Employees housing loans	19,561	18,918	18,820	18,526	18,915	19,312	18,817	20,132	20,555
Total non- current assets	459,614	480,319	508,092	527,218	536,336	545,645	554,249	564,854	574,762
current Assets									
Employees housing loans	2,321	2,960	2,896	2,736	2,793	2,852	2,912	2,973	3,036
Account receivable	61,546	68,453	53,141	50,689	54,908	56,061	57,239	58,441	59,668
Inventories	17,924	31,457	20,922	11,482	20,299	20,664	21,035	21,413	21,796
Spare parts & supplies	52,313	42,533	40,511	37,157	41,974	42,729	43,497	44,277	45,070
Other current assets	59,946	60,495	36,926	36,704	37,475	45,584	46,541	47,519	48,517
Cash on hand & banks	294,759	338,463	254,348	271,321	277,019	278,109	283,950	289,912	296,001
Total Current assets	488,809	544,361	408,744	410,089	434,468	446,001	455,174	464,535	474,087
Total Assets	948,423	1,024,680	916,836	937,307	970,803	991,645	1,009,423	1,029,389	1,048,849
Equity & liabilities									
Paid in capital	83,318	83,318	83,318	83,318	83,318	83,318	83,318	83,318	83,318
Statutory reserve	50,464	50,464	50,464	50,464	50,464	50,464	50,464	50,464	50,464
Voluntary reserve	80,699	80,699	80,699	80,699	80,699	80,699	80,699	80,699	80,699
Fair value reserve	58	114	3	(51)	49	50	51	52	53
Re-measurement of post-employment benefit obligation	-	-	(2,061)	(5,712)	-	-	-	-	-
Retained earning	646,443	630,379	592,642	599,167	604,330	611,613	621,059	632,715	646,627
Total Equity	860,982	844,974	805,065	807,885	818,861	826,144	835,592	847,249	861,162

Non - current liabilities

Non- current Liabilities

Long term loans	85	51	17	11,614	5,807	-	-	-	-
Death & compensation fund obligations	-	54,316	52,941	46,548	47,526	48,524	49,543	50,583	51,645
Obligations against capital project	-	-	-	11,390	8,154	4,917	1,681	-	-
Other non – current liabilities	9,106	8,992	8,545	8,096	8,266	8,440	8,617	8,798	8,983
Total non – current liabilities	9,191	63,359	61,503	77,648	69,752	61,880	59,840	59,381	60,628

Current liabilities

Current portion of long term loans	34	34	34	17	5,824	-	-	-	-
Death & compensation fund obligations	-	2,110	2,409	2,558	2,612	2,667	2,723	2,780	2,838
Obligations against capital project	-	-	-	3,983	3,983	3,983	3,983	-	-
Potash mining fees due to Gov.	6,330	23,698	4,063	339	7,493	7,650	7,811	7,975	8,143
Trade payables	28,941	25,535	17,468	15,537	21,143	21,523	21,910	22,303	22,702
Income tax provision	5,097	28,713	1,350	2,314	12,145	12,436	12,733	13,036	13,346
Other current liabilities	37,848	36,257	24,944	27,026	27,594	28,173	28,765	29,369	29,985
Total current liabilities	78,250	116,347	50,268	51,774	80,793	76,432	77,924	75,463	77,014

Total liabilities	87,441	179,706	111,771	129,422	150,545	138,313	137,764	134,844	137,642
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Total Equity & Liabilities	948,423	1,024,680	916,836	937,307	970,803	991,645	1,009,423	1,029,389	1,048,849
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B- APOT Profile:

Code:	141043		
Symbol:	APOT		
Address:	Al-Shmaisani - Amman		
Telephone:	5200520		
P.O. Box:	(1470) Amman 11118		
Email:	info@arabpotash.com		
Fax:	5200098		
Established Date :	7/7/1958		
Listing Date:	1/1/1978		
No. of Branches:	Local 3 - Abroad 0		
Main Objectives:	Extraction of salts and other chemicals from the Dead Sea brines, and setting up of the industries derived from the salts and chemicals extracted from the Dead Sea of its bottom or from the concession area.		
<u>Board of Directors</u>			
General Manager:	Brent Edward Heimann		
No. of Employees			
	Male	Female	Total
Jordanian	1756	58	1814
Non Jordanian	10	0	10
Total	1766	58	1824

