THE WORLD BANK

FINANCIAL PRODUCTS & CLIENT SOLUTIONS **Financial Risk Management** 

Commodity Price Risk - CASE STUDY

# Insuring Tunisia Against Commodity Price Fluctuations

The World Bank helped the Government of Tunisia launch a hedging program to protect its budget against large price increases and build its capacity to better manage the risk stemming from oil price volatility.

## Background

The Government of Tunisia has a steadfast commitment to diversifying its energy dependence away from oil. In November 2016, the Ministry of Energy, Mines and Renewables announced the 2030 Renewable Energy Action Plan, with a target to increase the share of renewable energy in the energy mix to 30% by 2030.

In the interim, Tunisia – a net oil importer – is vulnerable to increases in the prices of oil products. Unforeseen rises in these prices can impact the Government's fiscal and current accounts and diminish its ability to deliver on its social programs and domestic investments.

The Government has faced significant challenges in the Energy Sector since the Jasmine Revolution. For instance, while demand for energy products has been growing steadily by 5 to 11% per year, crude oil and natural gas production in 2017 decreased by 15% and 5% respectively.

As a result, energy import dependency reached 49% of consumption in 2017, while energy subsidies accounted for 2% and 2.8% of GDP in 2017 and 2018, putting further pressure on the current account and fiscal deficits.

In late 2018, the Government launched a dialogue with the World Bank and the IMF, created an inter-ministerial task force on energy subsidy reforms and developed a technical assistance roadmap with the World Bank to shift towards market-based energy prices.

The roadmap developed by the Government includes concrete objectives and principles, including the sustainable and progressive reduction in the cost of the government's subsidy program. To support this objective, the government asked the World Bank for assistance in launching a program to protect the budget against the risk of large increases in oil prices and their direct impact on the fiscal accounts.

## **Financing Objectives**

- Protect Tunisia's budget and transfer risk to the market to complement the ongoing subsidy reforms program
- Ease the burden of oil prices on the current account
- Build Tunisia's capacity to manage risks stemming from protecting fiscal accounts from oil price fluctuations

"The objective of any sovereign hedging program is to protect the public finances" Mr. Taoufik Rajhi, Minister of Reforms of Tunisia

### **Financial Solution**

- To protect its budget, Tunisia opted to use a financial instrument called a Call Option. *"Using this instrument is like a type of insurance against a rise in oil prices past a certain threshold"*, said Minister Rajhi. The government was able to protect eight million barrels of oil imports (roughly 30% of its net imports) against market price increases above a certain threshold, without giving up the potential benefit of price decreases. Over time, if prices increase beyond that threshold, Tunisia will be paid by the World Bank, so that Tunisia, on a net basis, never has to pay more for protecting fiscal accounts from oil price fluctuations than what is defined by its risk management strategy.
- Furthermore, World Bank Treasury helped build capacity among Tunisian Government's key stakeholders who have the decision-making power to reform the oil subsidy system.

"Given Tunisia's high dependence on imported petroleum, and the risks related to oil price volatility on the budget deficit through subsidized end-user prices, the Government's decision to hedge the price of a significant portion of its oil imports was prudent"

Moez Cherif, World Bank Lead Energy Economist for the Maghreb

## World Bank's Role

The World Bank combined the Energy team's hands-on involvement in Tunisia's energy and subsidy reform with the Treasury team's extensive market presence, to design and implement a risk management program, including:

- Conducted a diagnostic of the Tunisian subsidy system and the risk exposure of the Tunisian Government budget due to oil price fluctuations.
- Identified client's need for capacity-building support to cover a comprehensive set of topics, including legal, accounting, operational, pricing and market considerations, quantitative analysis, financial instruments, strategy development and implementation.
- Organized a 3-day technical workshop that brought together all the Tunisian stakeholders from the different ministries and state-owned enterprises affected by fuel prices, subsidies and/or a hedging program. The workshop enabled the Tunisian government to build capacity and reach the desired consensus.
- Supported Tunisian authorities to develop a risk identification and management strategy for protecting fiscal accounts from oil price fluctuations. Helped devise clear plan of action including the implementation plan for the oil hedae.
- Structured and executed hedging transactions to protect the Tunisia budget against fuel prices rising beyond a targeted threshold.

# Outcome

In December 2018, the Government of Tunisia gave the go-ahead to the World Bank to intermediate the purchase of oil options from market counterparties. The Government specified their maximum budget for the options premium in their trade order. The Treasury team executed the transaction in record time using a competitive bidding process to find the best (minimum) price in the market. The

successful trade was based on constant coordination with the Cabinet of the Minister in charge of major reforms during the process of execution to give him live updates on the process.

This hedging operation brings several benefits to Tunisia, such as (i) protection of the budget and the fiscal accounts from oil price shocks for the duration of 12 months; (ii) reduced pressure on the capital accounts, due to lower foreign reserves volatility; (iii) fostering of a risk management culture and development of necessary skillset.

"This engagement is a critical part of Bank support to a broad package of measures initiated by the Government of Tunisia to address the budgetary impact of growing energy demand and to shift the energy mix towards renewable resources" said Tony Verheijen, World Bank Country Manager.

The World Bank's multilateral legal status, AAA rating, long standing experience in using derivatives and extensive presence in the international markets allow it to act as an efficient intermediary for risk management transactions for its clients. The World Bank is able to:

2018 Oil Hedging Workshop Tunisian stakeholders and World Bank Treasury team

Coverage details	
Volume	8 million barrels
Maturity of coverage	12 months
Threshold (strike price)	\$65 / barrel based on a quarterly average



- Accommodate different legal and regulatory environments
- Standardize documentation to reduce intermediation, administration, legal and modeling costs, as well as placement fees
- Lead the outreach and market discussions with a wide range of market counterparties resulting in more competitive pricing
- Build the capacity of the client to undertake future transactions on their own.

The World Bank's (IBRD and IDA) AAA credit rating helps it achieve the best available rates in the market for risk management products without any credit clauses. The same rate is passed over to the client without any collateral requirement.

Expanding access to risk management instruments is one of the many ways the World Bank Group helps member countries build resilience against financial, economic and disaster risks. The World Bank Treasury develops innovative products that help clients maximize financing and mitigate risk.

#### **Examples of Oil Risk Coverage Around the World**

There are many examples of governments that have had experience with hedging fuel prices. The best-known case is Mexico, an oil exporter. Mexico launched its oil hedging program in 1990; since then, every year, it publicly announces the completion of its hedging program, which covers nearly 100% of its oil exports. Using Put Options, Mexico is able to secure a minimum revenue from its exports, while retaining the benefit of higher prices, and thus larger revenues.

Another example is Uruguay. An oil price hedging program implemented with the World Bank in 2016 has helped Uruguay mitigate the impact of significant oil price increases on the fiscal budget.

## World Bank Risk Management Products

The World Bank offers its member countries a wide range of financial products to manage risk and to reduce the impact of external shocks, such as interest rate, exchange rate, liquidity, commodity price volatility, natural / weather disasters, etc.

## What is an "Option":

"Options" are financial instruments in the family of instruments called "financial derivatives"

- An "Option" is a financial contract between two counterparties that offers the buyer the right, but not the obligation, to buy (call option) or sell (put option) the underlying asset at a specified price (strike price) and date (exercise date).
- In this case, the option buyer was the Government of Tunisia
- A "Call Option" is useful for an importer to hedge against a rise in market prices, while a Put Option protects an exporter against a decline in market prices.
- The Premium (cost) of the option is based on the level of protection needed and market conditions.
- At expiration, the "Call Option" buyer (Tunisia) receives a payment whenever the price of the underlying asset (oil prices) increase beyond the pre-determined threshold (the option strike price).

Oil Options offer several advantages that make them uniquely fit for the hedging objectives of a sovereign entity: they provide insurance against oil price fluctuations (with downside capped at the option premium), they are widely traded in the markets and their market prices are easily observable. Their financial terms (threshold of protection, maturity of the coverage, etc.) can be customized according to the needs of the client.



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