Structured Finance to the Rescue in Mexico

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Capital is expensive in Mexico, and it figures to remain expensive well into the future. The main reason for this is there are so many profitable opportunities to invest in Mexico, in comparison to the relatively small amount of money available. The supply of local savings is inadequate, in part because the country continues to have a young population, and in part because savings vehicles protected against taxes, inflation, and devaluation have not been targeted to Mexican savers with clear, well-executed mass marketing. The supply of foreign capital, especially foreign portfolio investment, has been notoriously volatile. Mexico has had three distinct booms in the past twenty years, each one financed by a tidal wave of dolars coming into the country.

In addition to being expesive, the cost of capital in Mexico has been catastrophically volatile. No risk-averse decisionmaker can approve a long-term investment project in Mexico, without taking the risk of looking trigger-happy soon afterwards. A project that makes good sense when the cost of capital is 14% turns into a reckless, ill-considered mistake when the cost of capital suddenly junps to 30%.

So only the intrepid have dared to tread, and then only after carefully labeling themselves as "long-term investors". But how many people are really long term investors? A cynic would say that a long term investor is a short term investor who is facing a loss and has not yet given up hope of recovery. Realistically, in financial markets most of the money that is available is short-term money. A financial intermediary can, up to a point, transform short-term deposits into long-term loans, but only at the risk of destroying its own credit rating. There is a permanent mismatch in all financial markets: the people who put money into the market only want to put it in for short periods of time, whereas the people who take the money and use it want to be able to use it for a long time before they have to give it back.

There is also a permanent mismatch with regard to risk aversion. Most people who buy financial assets are risk averse: they want safe

investments, and are willing to accept low yields as long as the investment is safe. In contrast, many of the people who want to take money out of the market intend to put it into risky ventures with high potential payoffs. They are quite willing to offer high yields but cannot offer much certainty that the money will come back.

These universal truisms apply with redoubled force in Mexico. Any investment, even the purchase of a short-term Mexican government bond, involves devaluation and inflation risk, as well as the possibility (however remote) of a visit from the tax collector. No wonder the preferred way to save in Mexico is to buy greenbacks and stuff them into the mattress; better still, stuff them into a mattress in Texas.

All investments involve risk, which can be quantified, disaggregated and categorized into its constituent components. In Mexico it is important to distinguish financial risk from business risk. Many of the potential investments in Mexico entail little or no risk of meeting insufficient need for the product or service. It is financial risk that makes ventures in Mexico so precarious. Equity capital is particularly scarce, so most ventures are financed with too much debt. And long-term, fixed-rate debt capital is also scarce, so most financing is short-term, floating-rate debt. That leaves most Mexican ventures particularly exposed to spiking interest rates. Shocks from devaluation and inflation complete the panorama.

Disaggregating Risks

The essence of modern finance, and the reason for the plethora of new financial instruments, is that a corporation's aggregate risk can be managed and offset more easily and cheaply if it is disaggregated into separate components. Investors balk at buying securities that entail a hodge-podge of risks. They will buy a security that entails a single risk, if the risk offsets the risk of another security they have in their portfolio. For example, a security that fluctuates with the profitability of airlines is quite risky, but an investor who already owns securities that fluctuate with the price of oil. The airline security, which is quite risky on its own, offsets the risk of the oil price.

Securities, therefore, should be issued that entail one single risk only. Securites should not be issued that require the purchaser to accept more than one risk. A corporation, according to this modern view, should not

finance itself by selling straight corporate bonds and ordinary common stock. Instead, the coproration should issue a larger number of different securities, each one entailing one risk and one risk only. These securities will then be bought by investors who need, or who are willing to accept that risk. It is a mistake to require them to accept too many different risks when they buy a security, because they will demand a much higher yield before they will be willing to take on a risk that they cannot offset.

Structured Securities

A structured security is a financial asset that has been designed so that it has only the risks that the buyer wants. It has an expected return comensurate with its risk, and it usually has upside potential as a "sweetener". More importantly, it has been structured so that it cannot go down very far, even if there are unexpected shocks. It is not a straight bond or a classic ordinary share. If it is a bond, it will have been packaged with several other instruments. These may include swaps, a cap or a floor, and one or more put options. The put options give the holder the right to sell the bond back to the issuer on several different dates before the final maturity date. It may have credit enhancement, and it may be convertible into common shares. It will usually have been set up to deliver an acceptable yield under many scenarios, and an excellent yield under a few scenarios. The buyer can win but cannot lose very badly. If the buyer has forecasted well, one of the favorable scenarios will occur, and the payoff will be high. If the buyer has forecasted wrong, he will earn a low but adequate return, and recover his investment.

A corporation may issue several different structured securities, each one entailing one of the risks it faces. Or it may choose to eliminate or offset some of the risks it faces with a hedging program. The key point is that the company will not try to force investors to accept risks other than the ones they are willing to take.

Mexican Companies as Issuers of Structured Securities

Mexican companies are in an ideal position to issue structured securities. The advantage of structured securities over conventional bonds and stocks is greatest when there is turbulence in the market. In a stable market, structured securities are slightly superior, because they are targeted to fill niches in portfolios. But in a turbulent market, they are vastly superior, and they open up access to capital for issuers who would

not be able to place conventinal securities, or who would have to place them at disadvantageous prices, offering sky-high yields to induce buyers to accept risks they do not want.

Many Mexican companies have solid, stable positions in the market, with strong brand franchises, good reputations, and long track records of good performance in real terms. What distorts their reported performance and forces them to operate in survival mode is currency volatility, the business cycle, and the massive upheaval called NAFTA. If they restated their accounts in terms of physical units, they would be able to show that the current downturn is severe, but not as drastic as the currency distortion and inadequate capitalization make it seem.

Refinancing with structured securities does exactly that: it peels away the layers of distortion, nullifies their evil effects, and lays bare the company's true strength and value. Investors place a value on the company much closer to what it is really worth, because they are buying cash flows that have been contoured to meet their needs.

Mexican companies can issue securities offering high yields, that are guaranteed under most scenarios. They will be committing themselves to pay a high price for capital, but the price will be lower than what they are paying now. So both the Mexican companies and the buyers will be winners. The Mexican companies will lower their cost of capital, and the buyers whill get securities that are likely to pay them high returns, with acceptable risk.

The buyers of structured securities are necessarily sophisticated, because amateurs cannot analyze the complicated combination of swaps, embedded options, and other embellishments that are put together to create the document that is being sold.

An Example

A Mexican group has only three securities outstanding: common shares, dollar-denominated bonds, and short-term peso-denominated notes. It wants to raise USD 25 million equivalent to repay existing debt and lower its cost of capital at the same time. The centerpiece of the solution is to issue a five-year structured debt instrument. This instrument is described in the following paragraph.

The structured debt instrument consists of several different financial instruments packaged together. These are:

- 1. A five-year fixed-interest Eurobond denominated in dollars.
- 2. A swap, pesos for dollars. The Mexican group is going to pay pesos, and receive dolars from the swap, and use the dollars to pay the investors who buy the Eurobonds.
- 3. A cap. If the peso interest rate rises above 50%, the cap will pay the excess above 50% to the Mexican group. This instrument gives the Mexican group protection against high inflation.
- 4. A floor. If the peso interest rate falls below 30%, the Mexican group will pay the difference between 30% and the market rate in pesos to the holder of the floor. The Mexican group will sell the floor to bring in revenue to lower its cost of capital. If the peso interest rate falls below 30%, the Mexican economy will be in recovery, and the Mexican group will be in a strong position to make payments to the buyer of the floor.
- 5. Two put options. One allows the buyers of the Eurobonds instrument to put them back to the seller at 100% of par value after one year. The second one allows the buyers of the Eurobonds to put them back to the seller at 100% of face value after three years.
- 6. A credit enhancement guarantee purchased from a strong credit, such as a Swiss insurance company. The credit enhancement guarantee covers coupon payments, the two put options, and the final repayment of principal. The credit guarantee raises the instrument's rating up to BBB.
- 7. A number of detachable warrants, allowing the holders to buy common shares of the Mexican group at a price in pesos 20% above the market price on the date when the instrument is issued. The warrants expire after five years, but automatically extend to ten years if the Mexican group's stock price performance does not meet or exceed a stated price.
- 8. A cash flow swap, exchanging a part of the Mexican group's cash flow for a part of another company's cash flow. The counterpart for this swap is chosen because its cash flow has been negatively correlated with the Mexican group's cash flow. This swap stabilizes the issuer's cash flow, and makes it less volatile from the point of view of the buyers of the structured debt instrument.

This structured debt instrument must be analyzed from the buyer's point of view and from the Mexican group's point of view. The buyer sees a dollar-denominated Eurobond that is guaranteed. It has a five year maturity but can be put at 100% of par after one year, and again after three years. It comes with warrants attached, which offer excellent upside potential. The issuing company looks like an erratic performer, but after taking into account the currency swap, the cap, the cash flow swap, and the credit enhancement, the instrument looks much less risky than the financial statements of the Mexican group would indicate. The instrument is safe enough to be classified as investment grade, so risk-averse buyers can buy it. The number of potential buyers for the instrument is enormous, so it should be easy to sell at any moment. A coupon rate of 9% is more than generous enough, so the decision is to buy.

The Mexican group sees a 5-year fixed payment schedule in pesos, at a cost lower than what it is currently paying for floating-rate peso notes. The approximate all-in cost of issuing this instrument is calculated in Appendix 1. The all-in cost in pesos is 48% fixed for five years.

The cost of this financing is lower than what the Mexican group is currently paying, and it cannot rise during the five-year life of the deal. It can, however, go down. If the peso interest rate declines, it will be possible for the Mexican group to enter into a new swap, which will offset the remaining payments of the existing swap, at lower the cost. This new swap is illustrated in Appendix 2.

In the examples given, we assume that the five-year structured financing begins on January 15, 1996. The five-year financing lengthens the average maturity of the Mexican group's debt, and lowers its cost of capital. One year later, on January 15, 1997, the Mexican group uses the new swap to lower its cost of capital once again.

The new swap is another currency swap, this time dollars for pesos. It offsets the remaining four years of the initial pesos-for-dollars swap that is part of the original structured financing. The new swap refinances the payment schedule once again, to get a more advatageous rate. The Mexican group can refinance as often as credit market conditions justify. In that fashion it can have long-term, fixed-rate debt, but reduce the cost of the debt whenever credit market conditions improve. And if credit market conditions worsen, its cost of debt cannot rise.

Recent Offerings of Structured Securities by Mexican Companies

Several innovative issuances of securities have recently been done by Mexican companies. Five of them are reported in the article attached.

Appendix 1: Estimating the All-In Cost of the Structured Debt Instrument at the beginning

Appendix 2: Refinancing the Structured Debt Instrument after One Year