AN IN-DEPTH LOOK AT THE VITRO BANKRUPTCY PROCEEDINGS

As prepared by Jacqueline Beer, Michael Ratpojanakul and Noah Singerman

Professor Edward Altman
Corporate Bankruptcy and Reorganization
April 15, 2013
The story of Vitro Corporativo S.A.B. de C.V. (the “Company” or “Vitro”), and its ongoing legendary bankruptcy proceedings, has transformed both the legacy of the Company as well as the potential landscape for U.S. and Mexican business relations. This first section will provide a narrative overview of Vitro’s bankruptcy proceedings. Additional information on the legal specifics within each stage of the ongoing proceedings will be provided in the next section, to be followed by our Z”-Score analysis and our overall assessment of the Company’s future health.

**Section 1: The Vitro Timeline**

Vitro has a long and storied history dating back to 1890, when the ultimate Company was created as an outgrowth of the Cuauhtemoc brewery founded in Monterrey by three families. From those beginnings, the Company has grown into the behemoth known today, which includes subsidiaries across Europe and the Americas, through which it offers, according to company materials, high quality products and reliable services that address the needs of both the glass container and flat glass businesses. These businesses cater to a wide range of end markets, including the construction and automotive markets for flat glass and the soft drink, beer, wine and liquor, food and cosmetics industries for glass containers.

Between 2003 and 2007, Vitro borrowed approximately $1.2 billion in debt, predominately from U.S. investors (the “Old Notes”), which were guaranteed by Vitro’s subsidiaries (the “Guarantors”). These guarantees provide that “the obligations of the Guarantors will not be released, discharged, or otherwise affected by any settlement or release as a result of any insolvency, reorganization or bankruptcy proceeding affecting Vitro.”

---

The troubles that led to financial distress began for the Company in 2008, when Vitro was plagued by plunging sales amid the global economic slowdown. Vitro’s operating income declined by nearly 37% from 2007 to 2008, and an additional 22.3% from 2008 to 2009. Due to the company’s large presence in the U.S., Vitro had also made a large play on natural gas derivatives -- during the summer of 2008, Vitro increased its purchases of hedges to lock in the natural-gas prices when the fuel rose to near record highs. The strategy grossly backfired as prices fell, and on October 10th, the Company announced that it had losses of approximately $227 million from derivatives on natural gas, the Mexican peso and interest rates. The company was forced to deliver $85 million for margin calls.

Just a few days prior, Moody’s had affirmed the B2 senior unsecured debt and corporate family ratings of Vitro, while at the same time had changed the outlook for Vitro’s ratings to negative from stable. The change in outlook was “due to Moody’s expectation that Vitro’s liquidity would continue to tighten over the next several quarters as free cash flow generation remained challenged by high energy costs and intensive capital spending. The modest deterioration of credit metrics, which leaves Vitro with limited room to absorb shocks at the B2 rating level, and possibly weaker than expected sales growth resulting from deteriorating demand in end markets in the flat glass segment, also drove the outlook change.”

In February 2009, the Company missed an interest payment for the first time— a $44.8 million liability on $1.2 billion of bonds. These notes were unsecured but guaranteed by certain subsidiaries of Vitro, including some located in the US. Vitro failed to pay $293 million in derivatives contracts as well as interest payments on bonds maturing in 2012, 2013 and 2017, triggering a default on approximately

---

3 Ibid, 4.
$1.5 billion in debt held by banks and unrelated bondholders across the globe. Shortly following the default, Vitro began negotiations with its bondholders, which continued for a year. Vitro’s proposal for debt forgiveness via a debt exchange was ultimately rejected in November 2010. In the fall of 2009, David Martinez, the Monterrey-native distressed debt mogul and founder of New York-based Fintech Advisory Inc., came to Vitro’s rescue. Martinez provided $75 million in financing, used to purchase the land on which the Company’s factories sit and lease the land back to Vitro. As part of this agreement, Martinez structured a lucrative option for himself – he was given an option to return the properties to Vitro, once it emerged from bankruptcy, in exchange for a 24% stake in the company. He also purchased $200 million in outside claims and settled them by obtaining a guarantee of repayment from the parent company. This was performed through a complex series of reorganization transactions, in which Vitro acquired the stock of subsidiaries in exchange for debt. Ultimately, these loans totaled an amount greater than the company’s obligation to its true third party creditors. This arrangement with Fintech helped Vitro move its most profitable units beyond the reach of creditors by shuffling the holding company’s assets so that the glassmaker eventually ended up owing approximately $1.5 billion of intra-company loans to its own subsidiaries, as Fintech was technically an insider with its potential 24% stake.

By turning its subsidiaries into its major creditors, the Company virtually ensured a passing vote for any reorganization plan under Mexican bankruptcy law. The passage was even more secure by virtue of a lockup agreement requiring the subsidiaries to vote in favor of a restructuring that would release them from the payment guarantees they had extended to outside creditors. However, the

---

reorganization plan was kept hidden from creditors for 10 months, according to public documents and court papers – it was not disclosed until October 2010 (as the transactions were revealed approximately 300 days after their completion, the transactions bypassed Mexico’s 270-day “suspicious period” in which the transaction could have been voided)\textsuperscript{10}. Throughout 2010, a number of event-driven distressed debt funds, including Paul Singer’s Elliot Management and Aurelius Capital Management, bought bonds of Vitro’s U.S. subsidiaries at a significant discount. It is estimated that Paul Singer and his counterparts own approximately $700 million of the company’s old debt\textsuperscript{11}. The terms of the purchases dictated that the bonds were secured by the Company’s U.S. subsidiaries. In the bonds’ respective indentures, each of the Vitro-owned guarantors “expressly acknowledges that this Guaranty is governed by the laws of the State of New York and expressly agrees that any rights and privileges that such Guarantor might otherwise have under the laws of Mexico shall not be applicable\textsuperscript{12}.”

Between August 2009 and July 2010, Vitro engaged in a series of negotiations with its creditors and submitted three proposals for reorganization, all of which were summarily rejected. In November 2010, a group of U.S. bondholders initially filed involuntary petitions against Vitro’s U.S. affiliates in the Northern District of Texas. In response, Vitro--but not its guarantor-subsidiaries--filed for voluntary bankruptcy protection in Mexico under the Ley de Concursos Mecantiles (the “LCM”) and for a Chapter 15 filing in the United States to have the LCM recognized across the border. The involuntary bankruptcy case was subsequently dismissed. After appeal, the involuntary bankruptcy case was remanded back to the bankruptcy court where the creditors were ultimately victorious. The Company hoped to gain court approval for a restructuring plan that supposedly had the backing of a majority of its credits. However, at the time of the filing, the restructuring plan as directed by Martinez had not yet been disclosed.


Unbeknownst to outside creditors, at the time of the bankruptcy filing, Vitro had outstanding third-party consolidated indebtedness of $1.7 billion, $1.2 billion of which represented the defaulted bond amount mentioned previously; this was outstripped by the $1.9 billion of outstanding indebtedness to its direct and indirect subsidiaries (the intra-company debt). The LCM advised that the Old Notes be extinguished, the guarantor’s obligations be discharged, and the existing equity retain its ownership position. Under Mexican law, only a simple majority vote is required to pass a reorganization plan (not a supermajority vote of each impaired class as would be required under U.S. bankruptcy law). In the case of a prepackaged bankruptcy such as Vitro, the threshold drops to 40%. This threshold was easily surpassed by Fintech and the subsidiaries that now carried 74.7% of the outstanding aggregate debt amount\(^\text{13}\).

The voluntary bankruptcy filing in Mexico was initially denied on the grounds that the intercompany claims should not be considered, and without such claims the Company could not reach the 40% creditor approval threshold necessary to file a LCM plan. However, the same judge reversed his own decision in April after a challenge from the Company itself, ultimately approving the reorganization plan and appointing a conciliator, Javier Navarro-Velasco, as per Mexican law to prioritize the list of claims. The Chapter 15 filing in the U.S. was intended to ensure the application of comity, in which the U.S. courts would respect and uphold the ruling of the Mexican courts. On July 21\(^\text{14}\), this filing was also passed in favor of Vitro’s Mexico-based proceedings.

In August 2011, the U.S. bondholders holding Vitro notes guaranteed by the non-debtor Vitro subsidiaries commenced suit in the New York state court seeking a money judgment on their guarantees and a declaratory judgment that Vitro’s reorganization would have no impact on their ability to collect


their guarantee claims against the subsidiaries. New York State ruled in favor of the bondholders, holding that the subsidiaries guarantees could not be modified in the foreign proceeding.\(^{15}\)

Navarro-Velasco’s research concluded that the Company’s creditors were sharply divided on the latest proposal, for obvious reasons. Instead of seeking a negotiated solution in which both parties would be left on approximately equal terms, on October 31, 2011 Navarro-Velasco handed the Mexican bankruptcy judge, Sandra Elizabeth Lopez, a finalized version of Vitro’s restructuring plan that was actually “less favorable to all creditors and particularly harsh towards any dissenting, holdout creditors.” The proposed plan provided as follows:

(i) the Old Notes would be extinguished and the obligations owed by the Guarantors would be discharged;

(ii) Vitro would issue new notes payable in 2019 (the “New 2019 Notes”) with a total principal amount of approximately $814.7 million. These notes would be issued to Vitro’s third party creditors, not including those subsidiaries with intercompany debt. The Notes were also “unconditionally and supportively guaranteed for each of the Guarantors.” Payment under the New 2019 Notes would go into a third party payment trust, which would deliver payment to those creditors who had agreed to the Plan. A second trust would be created for non-consenting creditors upon their written agreement to the terms of the plan

(iii) Vitro would provide to holders of the Old Notes $95.84 million aggregate principal amount of new mandatory convertible debt obligations due in 2015 with an interest rate of 12%, convertible into 20% equity in Vitro if not paid in full at maturity

\(^{15}\) Nathan, Bruce and Corbl, Richard; ”The Unenforceability of a Foreign Court Order Releasing Non-Debtor Guarantee Claims: The Limits of the Comity Doctrine,” National Association of Credit Management, Business Credit Newsletter, September/October 2012.

Finally, the plan also provided a cash consideration of approximately $50 per $1,000 of principal of Old Notes.\(^{17}\)

In early February 2012, the Mexican court in the State of Nuevo Leon approved the LCM, which included plans that pay creditors an estimated 40 to 60 percent of what was owed while preserving $500 million in Vitro equity and keeping the Sada family in control. The order also extinguished the non-debtor subsidiary guarantees. The plan went into effect on February 23\(^{rd}\), with Vitro issuing the New 2019 Notes and mandatory convertible debt and paying the restructuring cash into two third-party payment trusts – one for consenting creditors and one for non-consenting creditors.

The noteholders, disregarding the Mexican proceedings, continued with their actions in the U.S. against Vitro’s non-debtor subsidiaries under the subsidiary guarantees of indentures. In March, Vitro filed a motion to enforce the LCM and sought a temporary restraining order and permanent injunction from the actions taken by noteholders against the subsidiaries. Because Vitro has units in the U.S., the matter came before the United States Bankruptcy Court for the Northern District of Texas. The temporary restraining order was granted to shield Vitro from attempts by bondholders to collect on legal judgments or seize assets in the U.S.

In June 2012, U.S. Bankruptcy Judge Harlin DeWayne Hale denied Vitro’s request to enforce the LCM in the U.S. under Chapter 15. While the bankruptcy court did overrule on objections brought forth by the bondholders on the grounds that (i) the judicial system in Mexico is corrupt; (ii) the proposed enforcement would have a negative impact on credit markets and cross-border finance; (iii) the Mexican law is unfair; and (iv) Vitro’s insolvency proceeding in Mexico violated Mexican law and process due to lack of evidence and persuasiveness, Judge Hale did deem that the LCM was “manifestly contrary” to U.S. public policy and, if approved for enforcement, “the present order would create precedent without

any seeming bounds.” The judge included in his ruling “that the protection of third party claims in a bankruptcy case is a fundamental policy of the United States. The Concurso Approval order does not simply modify such claims against non-debtors, they are extinguished.” The bankruptcy court also declined to analyze the U.S. bondholders’ objection based on the Mexican plan’s violation of the U.S. absolute priority rule, in which any subordinated class of creditors is barred from receiving any distribution unless the class senior to it has its claims satisfied in full, because the court found the decision unnecessary in light of the court’s decision on the releases of non-debtor guarantors. Vitro immediately filed a request to take the decision directly to the Fifth Circuit Court of Appeals for expedited review, and the bankruptcy court granted the request.

While the bankruptcy judge did halt the LCM from being recognized in U.S. courts, Vitro won an order in July 2012 that prevented U.S. creditors who had rejected its reorganization plan from attempting to seize assets of Vitro’s U.S. subsidiaries while an appeal over the bankruptcy plan is pending. Bondholders argued that the subsidiaries could fend off asset seizure by filing their own bankruptcies. The U.S Court of Appeals for the Fifth Circuit in New Orleans extended the temporary restraining order granted earlier in the year.

In another victory for U.S. bondholders, in August 2012 the United States District Court for the Northern District of Texas vacated a series of bankruptcy court rulings that had previously blocked the noteholders from filing involuntary bankruptcy petitions against Vitro’s non-debtor subsidiary guarantors. The District Court struck down two of the subsidiary’s largest defenses, namely (i) holding that the petitioning creditors’ guaranty claims were not contingent; and (ii) the subsidiary guarantors

---

were not generally paying their debts as they came due. While the District Court did not grant the involuntary petitions outright, it did posture that the bankruptcy court would eventually enter involuntary orders for relief.

In October 2012, following a four-day trial in which hundreds of exhibits were presented, the Fifth Circuit Court of Appeals in New Orleans heard arguments from Vitro seeking to overturn the June ruling. Shortly after arguments were made, the Mexican government filed papers urging the U.S. appeals court to support Vitro’s argument for a reversal. The U.S. Court of Appeals in New Orleans announced in November its decision to uphold the June bankruptcy court’s ruling that denied enforcement of the reorganization.

In early December 2012, a U.S. judge ordered that ten units of Vitro be placed into U.S. bankruptcy as he had found that several of them had undertaken secret steps to prevent creditors from collecting monies owed to them. Judge Hale stated in his ruling that documents were uncovered that provided evidence in which five of the subsidiaries had secretly reincorporated in the Bahamas and one of the subsidiaries was sold. Despite numerous opportunities, the subsidiaries did not disclose the reincorporations and transfer of stock to the bankruptcy court, the District court or the New York State courts. Vitro vowed that it would consider all of its legal options after the ruling, and in mid December, said that it had begun the legal process to recover up to $1.59 billion in damages from the hedge funds that had sued the Company. Vitro said in a statement that it could collect damages from the trust that


has been holding new bonds and payments that correspond to investors who opposed the Mexican restructuring\textsuperscript{22}.

At the time of this report, the most recent Vitro development occurred in early March, when the company agreed to a settlement with U.S. creditors, ending the feud that had originated with the bond default in 2009. Fintech Advisory Inc. agreed to buy the creditors’ bonds with a face value of $729.2 million for 85.25 cents on the dollar and make a $57.5 million payment for fees and expenses, according to report documents. Fintech will also receive a 13\% stake in a Vitro subsidiary (in addition to their 24\% stake of the overall company) and a $235 million two-year note from the unit. This settlement requires court approval in both the U.S. and Mexico; if approved, it would end all legal action between the U.S. creditors and Vitro\textsuperscript{23}.

**Section 2: Vitro and the Law**

The Vitro bankruptcy case is legally complex. The firm’s cross border operations led to cross border legal action in Mexico and the United States. There are substantially different bankruptcy rules in the Mexican and American systems, which has complicated the Vitro case. There are three major legal frameworks impacting the Vitro bankruptcy:

- Mexican Concurso: Mexican Bankruptcy law, analogous to Chapters VII and XI of the United States Bankruptcy Code
- Chapter 15 of the U.S. Bankruptcy Code: Process by which foreign proceedings can be recognized by the US judicial system

\textsuperscript{22} Hals, Tom; “U.S. Judge Puts Units of Mexico’s Vitro into Bankruptcy,” Reuters, December 5, 2012. http://www.reuters.com/article/2012/12/05/us-vitro-bankruptcy-ruling-idUSBRE8B41HA20121205

Chapter 11 of the U.S. Bankruptcy Code: Defines corporate reorganizations. Found within subchapter 1, § 303, which governs involuntary insolvency procedures, is the focus herein.

The aim of this section is to focus on the fundamental questions surrounding insolvency rather than to prepare a litany of procedural rules or an anthology of the proceedings. Therefore, the discussion that follows is not intended to be exhaustive, but rather to focus on the core legal issues. In order to evaluate these central issues, each of the three major areas of legal interest listed above will be treated separately. In the following sections, an overview of the law will first be presented. Descriptions of the key sub-sections of each legal framework will then be identified. Finally, the importance of the law vis-à-vis the Vitro bankruptcy will be discussed.

**Ley de Concursos Mercantiles**

Due to the economic downturn and adverse movements in the market value of financial derivatives outlined above, Vitro failed to meet a number of financial obligations to its creditors. Furthermore, the nature of the economic downturn made it highly unlikely that these failures were one-off in nature. It was clear that Vitro would not be able to honor the original bond terms on a going forward basis, so the company decided to attempt to restructure its obligations under the Mexican bankruptcy process known as the Ley de Concursos Mercantiles.

*Ley de Concursos Mercantiles: An Overview*

The Ley de Concursos Mercantiles ("LCM" as previously defined) is the primary law governing corporate bankruptcies in Mexico. The law was written in 2000 and replaced the Ley de Quiebras Suspension de Pagos which had been in effect since 1943\(^2\). The LCM covers both liquidation and reorganization, unlike Chapters 7 and 11 of the U.S. Bankruptcy Code. The goal of the law is “...to

---

maximize the value of a company in crisis by its conservation, and in case of the impossibility of preserving the company, to preserve its economic value or such of its assets and right through an ordered liquidation procedure that maximizes the product of the alienation and provides an equal treatment between the trader and its creditors.\textsuperscript{25} In this context, trader refers to the Vitro holding company. Below is a brief summary of the LCM process.

Procedural steps

- Insolvency filing
- Appointment of specialists by the Instituto Federal de Especialistas en Concursos Mercantiles
- Judicial review of the insolvency filing ensuring that the criteria for have been met

Resolution Steps

- Reorganization plan agreed upon by holders of a simple majority of debt
- Liquidation, if attempts at reorganization are unsuccessful

The requirement to attempt to reorganize before liquidating illustrates the LCM’s preference for the going concern. In order to improve the reorganization process, an amendment to the LCM allowing for pre-packaged reorganizations was passed in 2007. Pre-packaged bankruptcies require only 40% approval by debt outstanding to become effective, a meaningfully lower hurdle than the majority rule applied to “conventional” reorganization.

There are a number of other important distinctions that can be made between the LCM and the U.S. Bankruptcy Code ranging from procedural nuance to the treatment of different creditor classes, but these are not central to the Vitro case. This is not to say that these facts are unimportant, but rather that this discussion of Mexican law is intended for use within the discussion of the Vitro case in

particular. As such, the inclusion or exclusion of these facts will be based not on their general utility, but instead on whether they impact the Vitro case in particular.

_Vitro & LCM: First Ruling_

Vitro initially submitted a pre-packaged restructuring plan to the Mexican court system under the LCM. This resolution was denied by the court. The plan rejection was due to how the plan passed, rather than the plan itself. The below table\textsuperscript{26} illustrates how the approval was based to a large extent on Vitro’s own subsidiaries rather than third party creditors.

\textsuperscript{26} Ibid 10.
Two major items stand out from the above table: the specific mention of the investor known as Fintech and the impact of intercompany loans on the voting process. These two items are interrelated. Prior to the restructuring, Vitro had claims on its subsidiaries of “approximately $1.2 billion in intercompany debt.” However, “On December 15, 2009, Vitro entered into a sale leaseback transaction with Fintech Investments Ltd. Under the terms of this agreement, Fintech paid $75 million

---

in exchange for the creation, in its favor, of a Mexican trust composed of real estate contributed by Vitro’s subsidiaries. This real estate was then leased to one of Vitro’s subsidiaries to continue normal operations. The agreement also gave Fintech the right to acquire 24% of Vitro’s outstanding capital or shares of a sub-holding company owned by Vitro in exchange for transferring Fintech’s interest in the trust back to Vitro or its subsidiaries. Partly as a result of these transactions, Vitro generated a large quantity of intercompany debt. Vitro’s subsidiaries became creditors to which Vitro owed an aggregate of approximately $1.5 billion in intercompany debt."

Fintech was a large creditor to Vitro prior to the debtor’s insolvency. In order to mitigate looming losses, Fintech improved its position through the transaction described above. Through the sale-leaseback agreement, Fintech became the owner of both substantial real assets and a large option on Vitro equity. Under the pre-packaged restructuring plan, the equity would remain largely unimpaired while creditors would realize large losses. Said differently, the plan was designed to benefit equity holders at the expense of creditors. Fintech’s option to purchase a 24% stake of Vitro’s equity would offset losses from the original debt holdings, aligning Fintech’s incentives with Vitro’s equity holders rather than its creditors. Knowing that the plan was unlikely to receive broad support from lenders, Fintech and Vitro increased their legal leverage by “flipping over” the firm’s intercompany loan assets to liabilities. The size of these liabilities was sufficient to make Vitro’s subsidiaries the majority debt holders, all but ensuring the plan would be accepted.

The court rejected the plan because of who did the voting rather than what the plan called for. The court’s objection to this voting process was based on several legal arguments. The initial arguments express the court’s opinion that the subsidiaries are legally bound to the holding company in such a way that they are effectively a single entity. The court points to tax and accounting rules in addition to the

28 Ibid 4-5.
LCM itself to make this point. Based on this “single entity” line of argument, the court disallowed the plan on the grounds that the overwhelming subject and the object of the ruling cannot be the same to the detriment of other interested parties. Below are illustrative excerpts from the decision.

**Income Tax Law:** “…in accordance with article 66 of the Income Tax Law, the subsidiary is considered to be such company in which more than 50% (fifty percent) of its voting shares are owned directly or indirectly, or both, by the controlling holding company...This definition is also seen in similar terms on the Commercial Reorganization and Bankruptcy Law in its article 15, which essentially describes it in the same way. --- Thus, subsidiaries or controlled companies, are also known as subordinate companies, because even though they have separate legal personality, the holding, or the ‘parent’ company exercises economic, financial, and administrative control, directly or indirectly, and hence, they lack autonomy for being under another company’s control...If these concepts are transferred to this subject matter, it is understood why, for purposes of the Commercial Reorganization and Bankruptcy Law, the holding company and its controlled companies are to be considered the trader.” Trader refers to the holding company whose substantial assets are equity in subsidiaries and whose major role is to raise and allocate funding to these subsidiaries. This topic is concluded with the statement that “…because according to the foregoing paragraphs, “Vitro” Sociedad Anonima Bursatil de Capital Variable, exercises the economic, financial, and administrative control over its controlled companies, directly or indirectly, and in that sense, in order for a request of commercial insolvency through a prearranged agreement to be admissible, is not legally possible to determine it through an agreement incorporating inter-company credits
representing the majority of the alleged debts, in order to reach the minimum percentage required by law for that purpose."

Accounting Law: “Furthermore the legislation governing stock companies considers the holding company and controlled companies as the same economic unit in terms of providing information accounting and executing transactions...Thus if according to numerous legislations the holding company and controlled companies constitute a group of common economic interests represented by the former, it would go completely against the teleology of the Commercial Reorganization and Bankruptcy Law to allow the trader, who exerts control over them, to allow special procedures through an agreement including the controlled companies...

Reorganization Law: “Also, not even the creditors that didn’t participate in the [pre-packaged reorganization plan] would have the possibility of vetoing it, because the simple majority would not be reached, that is, fifty percent of the total amount of acknowledged credits, since it is insisted that the intercompany debts attached to the prearranged agreement represent fifty-two percent of the total debt. – This scenario violates the nature of the commercial insolvency procedure, because there would be no concurrence, participation or opposition between the parties concerned, since a prearranged adjustment exists dominated by the trader itself through its subsidiaries...the insolvency law seeks to maintain the balance between the rights of the trader and those of his creditors. – Under these principles, which are expressed in the statement of motives that gave rise to the Commercial Reorganization and Bankruptcy Law published in the Official Federal Gazette on May 12, 2000, it is reached to the firm

---

conviction that by determining inadmissible the request through the agreement presented by the trader, it would be as consenting and granting an advantage not allowed by the Commercial Reorganization and Bankruptcy Law...Therefore, by excluding in the agreement the creditors controlled by the trader (subsidiaries), it is certain that with those remaining, who constitute 15.80% of the total debt, it doesn’t reach the range required to accept the restructuring plan specified by the law (40% of all debts), whereby the REQUEST OF COMMERCIAL INSOLVENCY WITH PRIOR RESTRUCTURING PLAN shall be declared INADMISSIBLE...\(^{31}\)

\textit{Vitro & LCM: The Appeal}

The initial ruling that the pre-packaged plan was inadmissible was overturned upon appeal. “[The Mexican appeals court] considers the reasons of nonconformance presented by the appellant in the first ground of appeal to be justified and sufficient to revoke the challenged judgment, which is coherent with the legal content of the presented appeals, which are studied jointly\(^{32}\).”

It is important to bear in mind that the Mexican appeals court is not charged with reviewing all the details of the case in question. Instead, “[t]he superior court, when issuing a decision shall be limited to study the appealed judgment and to the groups of appeal stated by the appellant. The appeal court when issuing their decision shall be limited to the analysis of the challenged judgment and to the nonconformities alleged by the appellant as base of the presented remedy\(^ {33}\).” Thus, the appellant needs only to find appropriate grounds upon which to appeal rather than to retry the topics which were central to the original legal process.

\(^{31}\) Ibid 15-17.
\(^{32}\) Ibid 22.
\(^{33}\) Ibid 19.
For Vitro, this meant that the legality of the approval of the pre-packaged bankruptcy by controlled companies did not need to be retried. The firm needed only to find appropriate grounds on which to focus the court of appeals’ attention. To this end, it called the original decision “...illegally considered to be inadmissible....” Arguing that it had followed the proper process, Vitro observed that it had followed the specific process outlined by the LCM. Specifically, Vitro detailed how it acted in accordance with the requirements of Article 20 of LCM and the remedies of LCM were therefore available to the firm. The firm also noted that the 40% threshold for approval of a pre-packaged bankruptcy was met34.

Vitro went on to argue that the lower court had erred on both fundamental and procedural bases. Vitro argued that the decision to deem the plan was inadmissible because “...the lower court judge prejudged by acknowledging the debts that Vitro, Sociedad Anonima Bursatil de Capital Variable, has with its subsidiaries in this stage of the process therefore preventing the corresponding commencement of the procedure in order to analyse all the credits of Vitro’s creditor that have appeared and will appear thereof, because [the appellants] state that the acknowledgement of all the credits should have been done – and must be done – at the conciliation stage and through the legal procedure for credit acknowledgement, because the lower court judge should have limit itself to verify that the requirements established in article 339 of the Commercial Reorganization and Bankruptcy Law were met.” Article 339 of the LCM outlines the requirements for a pre-packaged reorganization plan to be admissible. This argument left the court of appeals to consider the issues of subsidiary dominated pre-packaged reorganization plans and whether “the nature of the credits are subject of analysis at the moment of resolving about the admissibility of the Prior Restructuring Plan35.”

34 Ibid 24-25.
Given the procedural nature of the appeals claim, the appeals court referred in detail to the underlying LCM law. In the “Statement of Reasons” section of the law it states “The Commercial Reorganization and Bankruptcy Law (article 2 and relatives) divides the commercial insolvency procedure into a preliminary stage and two nominated stages, each of them with different purposes, terms, and resolutions. These are: The preliminary verification stage, the conciliation stage, and the bankruptcy stage. The preliminary verification stage...[has as its] basic objective is to determine if the trader is in a situation of commercial insolvency. / At this stage, no studies are done nor are the credits of the trader are acknowledged... 36 It is only in the following stage that the acknowledgement of debt is to occur: “In accordance with the Commercial Reorganization and Bankruptcy Law, ‘acknowledged creditors’ means those who acquire such a position in virtue of the acknowledgment, graduation and priority of credits judgment declared by the judge that considers the case 37.”

Vitro made the argument that this explicit order of operations was not followed by the district court. Other key sections of the LCM are Articles 341 and 342:

“Article 341: Should the request for commercial insolvency with prior restructuring plan meet all the previous requirements, the Judge shall pass a judgment declaring commercial insolvency with prior restructuring plan with no need to appoint an auditor.

Article 342: The insolvency judgment must meet the conditions required by this Law, and from then on, the commercial insolvency with prior restructuring plan shall be processed as an ordinary insolvency procedure, with the only provision that the conciliator must consider the restructuring plan with the request when proposing any agreement.”

36 Ibid 28-29.
37 Ibid 28-29.
Within its discussion of the process, the court of appeals noted that “[i]t is being emphasized that within this [verification] stage, the study [of credits] is not performed nor is solved with respect to the acknowledgement of the credits of the trader.” 38 Along with the other points of order, the court of appeals recognized that Vitro’s requirements within the verification stage had been satisfied while the district judge had acted without regard to the graduated nature of the LCM. This point of contention is stressed through repetition as when the court of appeals states that the district court “…judge, without being corresponding stage of processes…breaching this way the rules of the procedure of to the detriment of the appellants and their right to initiate the procedure…39.” According to these findings, the court of appeals “considers that the appellants are right…40

In addition to the procedural claims, the court of appeals takes on the question of whether Vitro’s intercompany loans should be acknowledged as credits in subsequent stages of the LCM proceeding. The court observed “…that the Commercial Reorganization and Bankruptcy Law does not make a difference nor qualifies the credits between subsidiaries or related companies and credits between the trader and its other creditors, nor prohibits that the debts between subsidiary controlled companies to be accounted for executing an insolvency agreement, because there is no provision in the Commercial Reorganization and Bankruptcy Law excluding related companies or the companies controlled by a holding company in an insolvency procedure41.” In addition to this general statement, the court of appeals referred to precedent cases in which intercompany debts were not excluded. Specifically, the decision refers to testimony from the General Director of the Federal Institute of Specialists of Insolvency Procedures, Giselda Nieblas Aldana, from an earlier case. Paraphrasing, Ms. Aldana concluded that intercompany loans were not on the list of excepted credits which may be unacknowledged under the LCM protocols. To illustrate her point, Ms. Aldana referred to specific cases

38 Ibid 34.
39 Ibid 37.
40 Ibid 39.
41 Ibid 38.
where similar credits were acknowledged including the cases of: Grupo Iusacell, Corporacion Durango, Grupo Tribasa, and Controladora Comercial Mexicana. Based on these arguments, the court found “...it can be concluded that, contrary to the considerations of the District Judge, the Commercial Reorganization and Bankruptcy Law does not distinguish or qualifies credits between subsidiary or related companies, and between credits between the trader and the rest of its other creditors, nor it prohibits that debts between subsidiary companies can be taken into account for the purpose of executing an insolvency agreement.”

LCM Conclusion

As described above, the court of appeals found in favor of the appellants on both issues of procedure and underlying nature of the intercompany claims. “Therefore, as requested by Vitro, Sociedad Anonina Bursatil de Capital Variable, and its creditors which have signed the initial document and the preliminary restructuring plan, it is now fitting to declare the commercial insolvency of Vitro, Sociedad Anonina Bursatil de Capital Variable, with prior restructuring plan.” Accordingly, the court of appeals revoked the decision of the district court and declared the prepackaged insolvency.

The LCM Plan

The appellate decision entered Vitro into the prepackaged insolvency process under the LCM. Briefly, the outcome of restructuring was:

42 Ibid 40-42.
43 Ibid 50.
44 Ibid 53-54
• Notes issued prior to insolvency extinguished
  - Aggregate face USD 1.225 billion

• Subsidiary guarantees of the old notes extinguished

• Cash payment
  - $50 per $1000 face of original notes

• New notes issued
  - Face USD 814.65 million, to be partially amortized between the fifth and seventh year following issuance
  - Coupon 8.0%
  - Maturity 2019
  - Intercompany claimants forewent these notes in lieu of “other promissory notes”

• Payment for consenting creditors to be made through a third-party trust
  - Secondary trust established for non-consenting creditors should they subsequently agree to the plan

• New mandatory convertible debt issued
  - Face USD 95.84 million
  - Coupon 12%
  - Maturity 2015
    - If payment at maturity is not made, the notes will convert into 20% of Vitro equity

**Chapter 15**

Although Vitro was successful under the LCM, the firm’s legal disputes were far from settled.
The Vitro group had meaningful assets in the United States, in addition to its Mexican operations. The
original notes were also issued under New York law, per the issuing documentation. Rather than an end, these multinational activities set the Mexican victory as the starting point for U.S. proceedings. Specifically, Vitro requested that the U.S. recognize and enforce the LCM plan under Chapter 15 of the U.S. Bankruptcy Code.

Overview of Chapter 15

According to the Administrative Office of the U.S. Courts, “The purpose of Chapter 15, and the [Model Law on Cross-Border Insolvency promulgated by the United Nations Commission on International Trade Law ("UNCITRAL") on which it is based, is to provide effective mechanisms for dealing with insolvency cases involving debtors, assets, claimants, and other parties of interest involving more than one country.” (U.S. COURTS) That is, Chapter 15 provides a process by which a firm that has undergone bankruptcy proceedings outside of the United States asks the U.S. judicial system to recognize and enforce those non-U.S. proceedings. The notion of comity underpins Chapter 15 in order to facilitate relatively efficient resolution of insolvency and consistent treatment of creditors. However, comity can be denied if the foreign proceedings do not reflect the values of the U.S. law.

In the Vitro bankruptcy court opinion dated June 13, 2012, “[c]omity has been defined as the ‘recognition which one nation allows within its territory to the legislative, executive, or judicial acts of another nation, having due regard both to international duty and convenience, and to the rights of its own citizens or other persons who are under the protections of its laws.\textsuperscript{46}” The judge then added his interpretation: “Granting comity to judgments in foreign bankruptcy proceedings is appropriate as long as U.S. parties are provided the same fundamental protections that litigants in the United States would receive\textsuperscript{47}. This describes the utility and application of Chapter 15 from a high level. A more specific discussion of the articles relevant to Vitro follows below. It is important to bear in mind when

\textsuperscript{47} Ibid 6.
considering the Vitro case that Chapter 15 is a process by which various reliefs may be requested and
that the recognition of foreign proceedings is not guaranteed.

The Chapter 15 process must begin with a petition made by a representative of the bankrupt
firm and to the U.S. judicial system that the decision of the foreign court be recognized, according to
§1504 and §1505. The specific requirements in order to petition for recognition are provided in §1515.
The portion of these procedures pertaining to what constitutes an authorized representative did
become an issue within the Vitro case. However, this procedural line of argument was effectively
dismissed, so the topic will not be detailed here. Once an appropriate request for recognition has been
made, several other provisions of Chapter 15 come into play. With respect to the Vitro case, the most
important key sections are §1506, §1507, §1520, §1521, and §1522. Each of these is briefly explained
below.

Articles 1507, 1520, and 1521 relate to the relief available to the debtor firm. Each of these
articles provides a different set of criteria for relief. The most straightforward is §1520, which becomes
immediately active once the foreign proceeding is recognized by the U.S. court. Under §1520, certain
activities of the creditors are curtailed including the transference of debtor assets and the continuation
of commencement of various proceedings against the debtor. According to §1521, relief in addition to
that provided under §1520 can be granted by the court at the request of the debtor. The types of relief
are broad but generally defined in this subchapter, providing a clear process for a range of
reorganizational needs. In addition to the specific reliefs, provided automatically in the case of §1520
and upon successful request under §1521, broadly termed “additional assistance” is also available under
§1507. This subchapter does not exist to provide bankrupt firms with a blanket release, as there are
requirements for any additional assistance to be provided. Rather, §1507 provides the court with
flexibility to deal with unforeseen situations.
The U.S. Bankruptcy Code seeks to reach a balance between troubled borrowers and their loss-bearing lenders. Chapter 15 reflects this, as the ability to relieve debtors outlined above is balanced by the protections of creditors found in §1522. This article specifically requires that relief may only be granted if creditors are “sufficiently protected”. (As a brief aside, this limitation is quite broad and allows the court flexibility with which to protect creditors. Through counterfactual, this flexibility can be proven invaluable by considering the outcome of the Vitro case under the LCM. The lack of judicial flexibility in protecting external credits allowed the firm to restructure its balance sheet in order to essentially guarantee the passage of a reorganization plan that the defaulting entity itself put forward.)

Another key protection of creditors and the court itself is found in §1506, which states: “Nothing in this chapter prevents the court from refusing to take an action governed by this chapter if the action would be manifestly contrary to the public policy of the United States”. That is to say that the spirit of U.S. law will dominate any procedural or specific argument, even if valid, under Chapter 15.

### Vitro & Chapter 15: First Ruling

The Chapter 15 case was brought by Vitro’s representative on April 14, 2011. In subsequent proceedings, the request for recognition was made along with requests to “(I) Enforce the Mexican Plan of Reorganization of Vitro S.A.B de C.V., (II) Grant a Permanent Injunction, and (III) Grant Related Relief” (No 12-105-42 page 11). The details of the second part of the request read “[A] permanent injunction enjoining all persons from initiating or continuing any suit, action, extra-judicial proceeding or other proceeding (including [already commenced actions in New York state court]) or any enforcement or collection process (including pursuant to any judgment, notices of attachment or [levies, restraining notices, or similar documentation]) in any jurisdiction within the United States or its territories...against
Vitro SAB and/or the Old Guarantors...or their Property...except as permitted under the Concurso Plan of the Concurso Approval Order... Subsequently, a group of creditors objected to the enforcement request. After hearing arguments and considering precedent, the court denied the Enforcement Motion. The following paragraphs detail the key arguments in the case and why the court ultimately concluded that the Enforcement Motion could not be granted.

The presiding judge identified two major issues impacting the enforcement request. The first is to determine if the Concurso injunction against creditors taking legal action against Vitro’s guarantor subsidiaries applies to U.S. creditors under Chapter 15, §1507 or §1521 on the basis of the convention of comity. Referring to precedents, the judge highlights that the comity convention is not a rule and does not mean “...categorical deference to foreign proceedings. It is implicit in the concept that deference should be withheld where appropriate to avoid the violation of laws, public policies, or rights of the citizens of the United States.”

The second issue is to check that if the requested relief may be valid under §1507 or §1521, such relief would not be “manifestly contrary to the public policy of the United States,” per §1506. “Manifestly contrary” is left undefined, which required the court to look to precedent. According to the precedent provided by the court, §1506 “should be ‘invoked only under exceptional circumstances concerning matters of fundamental importance for the United States.’ ” By setting a high bar for the application of §1506, the rest of Chapter 15 is not eviscerated. There are two specific criteria that the judge uses in determining whether a foreign proceeding was manifestly contrary to U.S. policy: “(1) whether the foreign proceeding was procedurally unfair; and (2) whether the application of foreign law...would ‘severely impinge the value and import’ of a U.S. statutory or constitutional right, such that granting

---

50 Ibid 6.
51 Ibid 6.
comity would ‘severely hinder United States bankruptcy courts’ ability to carry out...the most fundamental policies and purposes’ of these rights.”

Following Vitro’s request for recognition of the Mexican restructuring plan under Chapter 15, a number of creditors filed suit. The focus of the legal action was the treatment of Vitro debt that had been guaranteed by its subsidiaries within the LCM process. Specifically, these subsidiary guarantees were extinguished as part of the prepackaged bankruptcy, despite the fact that the subsidiaries themselves had not defaulted. The U.S. court agreed with Vitro’s creditors that the extinguished guarantees were the “most problematical part of the Mexican Proceeding.” This Court expressed its views at that time that it had grave concerns about any plan in Mexico that would protect non-filing subsidiaries that guaranteed United States indentures. However, Vitro SAB proceeded with such a plan anyway.

The creditors argued that the LCM plan was unacceptable on three grounds: general unfairness leading to the disputed injunction, failing to meet obligations under §1506, and violation of §1507.

In the first objection, the creditors contended that the LCM process violated U.S. principles specifically based on the lack of transparency and the lack of a disinterested tribunal and more generally on the “…systemic corruption of the Mexican judiciary...” The U.S. court was not moved by these allegations of corruption or lack of due process.

With regards to public policy, the creditors argue that the Concurso plan would violate “(1) the absolute priority rule; (2) discharging non-debtor debts; (3) good faith dealing; (4) enforcement of negotiated instruments; (5) the prohibition of vote buying; and (6) violated many, if not all, of the

---

52 Ibid 6.
54 Ibid 13.
56 Ibid.12.
protections afforded creditors under Title 11. The court finds this objection to have merit, as it “…conclude[s] that the protection of third party claims in a bankruptcy case is a fundamental policy of the United States. The Concurso Approval Order does not simply modify such claims against non-debtors, they are extinguished. As the Concurso plan does not recognize and protect such rights, the Concurso plan is manifestly contrary to such policy of the United States... and cannot be enforced here."

Moving to §1507, under this article the court may allow for “additional assistance” where the court sees fit and subject to certain requirements, as discussed above. The creditors claim that the requirements to seek additional assistance under §1507 were not met, and therefore that additional relief would be inappropriate. Specifically, the creditors point to subsection §1507(b), which outlines these requirements and “contend the plan violates: (1) subsection (b)(1) by discriminating between foreign and non-foreign creditors; (2) subsection (b)(2) by protecting creditors from the inconvenience in the processing of claims in the foreign proceeding; (3) subsection (b)(3) by failing to reasonably assure the prevention of fraudulent transfers; and (4) violates subsection 1507(b)(4) by failing to distribute the proceeds of the estate in substantial accordance with the Bankruptcy Code. The court found that the objection was meritorious based on the distribution of assets under the Concurso plan. Specifically, “The Concurso Approval Order does not provide for the distribution of proceeds of the debtor’s property substantially in accordance with the prescribed order by Title 11. Under a Chapter 11 plan, the noteholders would receive their distribution from the debtors and would be free to pursue their other obligors, in this case the non-debtor guarantors. The Concurso plan provides drastically different treatment in that the noteholders receive a fraction of the amounts owed under the indentures from

57 Ibid 12.
58 Ibid 14.
59 Ibid 12.
Vitro SAB and their rights against the other obligors are cut off60.” This is a second reason that the Enforcement Motion was rejected.

In addition to finding merit in the objections on the grounds of §1506 and §15067, the court finds that the LCM plan does not satisfy the requirements of §15021 and §1522 as it “neither sufficiently protects the interests of creditors in the United States, nor does it provide an appropriate balance between the interests of creditors and Vitro SAB and its non-debtor subsidiaries61.” This is the third reason that the Enforcement Motion was rejected by the court.

_Vitro & Chapter 15: The Appeal_

On November 28, 2012, the United States Court of Appeals for the Fifth Circuit ruled on three appeals borne from the Chapter 15 decision discussed above. The court of appeals described its role in the case thus: “[the court] review[s] a district court’s affirmanice of a bankruptcy court’s decision by applying the same standard of review that the district court applied in re: Martinez, 564 F.3d 719, 725-26 (5th Cir. 2009.) Accordingly, questions of fact are reviewed for clear error and conclusions of law are reviewed de novo62.” As outlined above, a number of conclusions of law were drawn in the original Chapter 15 proceedings, but the court of appeals was able to focus on the key issue of the extinguishment of subsidiary guarantees. This focus was provided by Fintech and Vitro, as their appeals each asked only “Whether the Bankruptcy Court erred as a matter of law when, after it concluded that the Concurso Approval Order was the product of a process that was not corrupt or unfair to the Appellees, it refused to enforce the Concurso Approval Order solely because the Concurso plan novated

60 Ibid 13.
61 Ibid 14.
guarantee obligations of non-debtor parties and replaced them with new obligations of substantially the same parties?" 63

In order to address this question, the court of appeals looked to the subchapters §1506, 1507, 1521, and 1522. The court found that there should be an order of operations when applying these sections in cases, like that of Vitro, in which comity may be at odds with the spirit of U.S. law. The court believed that the first step in the decision making process is to consider the request for enforcement under §1521. This subsection provides for a number of specific reliefs and is therefore the easiest to test for applicability, hence its place as “step one”. If none of the specific reliefs were found to be appropriate, the court can consider “any additional relief” under subsection §1521(a)(7). The court believes that the “appropriate relief” afforded by §1521 “to be relief previously available under Chapter 15’s predecessor, §304. Only if a court determines that the requested relief was not formerly available under §304 should a court consider whether relief would be appropriate as ‘additional assistance’ under §1507 64.”

Importantly, if any relief could be granted under either §1521 or §1507, such relief must be acceptable with respect to §1506 and §1522. These articles are discussed above, and are accordingly dealt with only briefly here. §1506 requires that any relief not be manifestly contrary to U.S. policy. §1522 requires that the interests of creditors are sufficiently protected. The appeals court found that “Applying [the court’s] analytic framework to Vitro’s request for relief, the bankruptcy court did not err in denying relief [to Vitro]. Sections 1521(a)(1)-(7) and (b) do not provide for discharging obligations held by non-debtor guarantors...Even if the relief sought were theoretically available under §1521, the facts of this case run afoul of the limitations in §1522. Finally, although we believe the relief requested may theoretically be available under §1507 generally, Vitro has not demonstrated circumstances comparable

63 Ibid 31.
64 Ibid 34.
to those that would make possible such a release in the United States, as contemplated by §1507(b)(4).

The key issue of subsidiary guarantees was, once again, central to the court’s decision. Paraphrasing the court of appeals, permanent revocation of the subsidiary guarantees was not permissible under §1521. This article allows for injunctions against actions relating to debtor assets, where assets generally include the parent’s holdings of stock in a subsidiary but not the subsidiary’s assets. This distinction precludes the application of the specific relief provisions of §1521. The more general relief afforded by §1521 was also found to be unavailable to Vitro because the release of subsidiary guarantees had, in precedent cases, been rejected by the court of appeals. This general rejection of relief to non-debtors places the Vitro request outside the purview of the broader “any appropriate relief” allowed for under §1521.

Having rejected Vitro’s requested relief under §1521, the court then considered the issue under §1507. The court again rejected the release of subsidiary guarantees:

“We conclude that §1507 theoretically provides for the relief Vitro seeks because it was intended to provide relief not otherwise available under United States law. But the devil is in the details, and in this case, the bankruptcy court correctly determined that relief was precluded by §1507(b)(4). Under that provision, the bankruptcy court had to consider whether the relief requested was comparable to that available under the Bankruptcy Code... We also hold that because Vitro has failed to show the presence of the kind of comparable extraordinary circumstances that would make enforcement of

---

66 Ibid 41.
67 Ibid 42.
such a plan possible in the United States, the bankruptcy court did not abuse its discretion in denying relief. 68

Interestingly, the court acknowledged that the requested relief could be possible in certain circumstances, as it had in other districts, but that Vitro did not qualify: “We conclude that the evidence Vitro presented at trial does not support the presence of circumstances comparable to those necessary for effectuating the release of non-debt guarantors in those of our sister circuits that allow such a release. 69 In a subsequent section, the court reiterated this failure along with other shortcomings of the Vitro plan. “Vitro has not shown that there existed truly unusual circumstances necessitating the release [of non-debtor liabilities]. To the contrary, the evidence shows that equity retained substantial value. The creditors also did not receive a distribution close to what they were originally owed. Moreover, the affected creditors did not consent to the Plan, but were grouped together into a class with insider voters who only existed by virtue of Vitro reshuffling its obligations between it and its subsidiaries. 70 Therefore, the “[court of appeals] conclude[d] that the bankruptcy court’s decision was reasonable. 71”

Although the court of appeal’s decision was plain by the discussion of §1507, §1521, and §1522 the court did address §1506 in order to fulfill the framework it had set out. Article 1506 is supposed to be applied narrowly. The article is generally limited to circumstances where an action prescribed by foreign proceedings would be manifestly contrary to the policy of the United States. The court ultimately does not rule on the application of §1506 in this case, instead deferring to the treatment of the primary subchapters. “Because we conclude that relief is not warranted under §1507, however, and would also not be available under §1521, we do not reach whether the Concurso plan would be

68 Ibid 44.
69 Ibid 50.
70 Ibid 55.
71 Ibid 59.
manifestly contrary to a fundamental public policy of the United States.” The lack of applicability of §1507 and §1521 led to the court of appeals to “…AFFIRM in all respects the judgment of the district court affirming the order of bankruptcy court in No.12-10542, and we AFFIRM the order of the bankruptcy court in Nos. 12-10689 and 12-10750. The temporary restraining order originally entered by the bankruptcy court, the expiration of which was stayed by this court, is VACATED... 72

Involuntary Insolvency

The final set of major legal activities in the Vitro case revolved around involuntary insolvency. Creditors initiated involuntary insolvency proceedings against a number of Vitro’s U.S. based subsidiaries following the debtor’s failure to pay, under article 303 of Chapter 11 of the U.S. Bankruptcy Code.

Overview of §303

Creditors can file for involuntary bankruptcy as a means to seek remuneration from debtors, pursuant to certain criteria. With regards to the Vitro case, the most important requirements are that the liability be neither contingent nor subject to a bona fide dispute. Subsection §303 (h) allows for a judgment against the debtor if:

“(1) the debtor is generally not paying such debtor’s debts as such debts become due unless such debts are the subject of a bona fide dispute as to liability or amount; or

(2) within 120 days before the date of the filing of the petition, a custodian, other than a trustee, receiver, or agent appointed or authorized to take charge of less than

72 Ibid 60.
substantially all of the property of the debtor for the purpose of enforcing a lien against such property, was appointed or took possession.\textsuperscript{73}

\textit{Involuntary Bankruptcy and Vitro}

A number of creditors initiated an involuntary bankruptcy case against Vitro in early 2011. The case had a lengthy process involving an initial decision, an appeal, and a post remand decision.

The case turned on facts idiosyncratic to Vitro and, once again, the issue of the subsidiary guarantees was the focal point for the first involuntary bankruptcy decision. In addition to the general legality of such guarantee extinguishments, the language defining the guarantees in the bond indentures was unclear, which led to dispute. The courts judge addressed the ambiguous language as follows: “...each of the indentures provides that ‘[u]pon failure by the company to pay punctually any...amount [due under the indenture], each Guarantor shall forthwith on demand pay the amount not so paid at the place and in the manner specified in the Indenture.” The judge noted that in a subsequent section, the bond indenture states “[e]ach Guarantor irrevocably waives acceptance hereof, presentment, demand, protest, and any notice not provided for herein, as well as any requirement that at any time any action be taken by any Person against the Company or any other Person.” The incongruence of these statements and the unclear construction of the second declaration left the question of demand in the hands of the court. The court found that demand for payment was in fact required.

This finding was a blow to the creditors’ case they had not demanded payment from the guarantors, despite officially accelerating Vitro’s debt. Acceleration effectively brings forward the

<www.law.cornell.edu/uiscode/text/11/303>

\textsuperscript{74} In Re: Vitro Asset Corp., et al., Alleged Debtors. Case No. 11-32600-hdh-11, Jointly Administered April 21, 2011 1.

\textsuperscript{75} Ibid 1.
timeline of payments associated with the debt, but as noted by the judge, “acceleration of the obligation of the primary obligor is not the same as demand upon the guarantors.” The lack of demand meant that the claims of the creditors against the guarantors were contingent on the demand being made, which prevented the court from finding in favor of the creditors under §303(b)(1) as discussed above. The court also found that a ruling against Vitro was unacceptable on the basis of §303(h)(1) because the company was generally making payments on time. Although large in size, the missed bond payments were offset by the larger number of smaller payments made under the normal course of business, according to the judge. The judgments in favor of Vitro were affected according to Demand and Paying Debt Orders respectively.

The Involuntary Appeal

The Demand Order and Paying Debt Order issued by the lower court were the basis of the creditors’ appeal. Dealing first with the demand for payment, the court of appeals differed from the lower court, finding that the bond indenture did waive the requirement for demand. Precedent played a large role in this ruling. The court of appeals referred to other cases where more general demand language is followed by explicit waivers, stating “…New York courts enforce the waiver provision and do not require demand.” The court of appeals also considered the impact of a demand requirement on the underlying liability, finding that “…the phrase ‘shall forthwith on demand pay,’ read in the context of the guaranty provisions as a whole, does not require demand as a condition precedent to liability. Section 10.02 [of the bond indenture] provides that ‘[t]he obligations of each Guarantor hereunder are unconditional and absolute[.]’ Therefore, read in the context of these provisions, the phrase ‘shall

76 Ibid.2.
forthwith on demand pay’ means that the Guarantors must pay when asked, but that demand of payment is not a precondition to a payment. These lines of consideration led the court of appeals to rule in favor of the creditors, explaining that “...[the bankruptcy court erred as a matter of law in holding that the Non-Operating Alleged Debtors’ obligations were contingent as to liability. The court therefore vacates the Demand Order and remands the matter to the bankruptcy court for further proceedings consistent with this opinion.”

The court of appeals next considered the Paying Debts Order by “…apply[ing] a four-factor test to determine whether an alleged debtor is generally not paying its debts as they become due...Under this test, the court considers '(1) the number of unpaid claims; (2) the amount of such claims; (3) the materiality of the non-payments; and (4) the debtor’s overall conduct in [its] financial affairs.” The size of the missed bond payments was such that “…the Operating Alleged Debtors were not paying greater than 99.9% of their unsecured debts.” The countervailing evidence that was persuasive in the lower court was that though small in relative dollar amount, the company had successfully been making a much greater number of payments in the course of operations. While the court of appeals acknowledged that there is no firm rule to determine whether payments are regularly being made, it goes on to say that “…the court has not found, a single reported case in which a bankruptcy court has ever found in circumstances like these, or an appellate court has affirmed a finding, that the debtor was generally paying its debts as they became due. Indeed, the reported cases invariably reach the opposite conclusion.” Based on this precedent, “The court is therefore left with the definite and firm conviction that a mistake has been committed in finding that the Operating Alleged Debtors were generally paying

---

78 Ibid 15-16.
79 Ibid 16.
80 Ibid 17.
81 Ibid 18.
82 Ibid 19-20.
their debts as they became due\textsuperscript{83}.” Accordingly, the court of appeals ordered that “The Paying Debts Order is vacated, and this matter is remanded to the bankruptcy court for further proceedings consistent with this opinion\textsuperscript{84}.”

\textit{Involuntary Insolvency Returns to the Lower Court}

With both the Demand Order and the Paying Debt Order having been vacated, the involuntary bankruptcy cases against Vitro were remanded to the bankruptcy court. With most of the legal questions answered, “[t]he only finding necessary [in order to determine if relief should be entered in favor of the Petitioning Creditors] concerns whether their debts were the subject of a bona fide dispute as to amount\textsuperscript{85}.” Although §303 refers to bona fide disputes, the code does not define them. In order to comply with the bankruptcy code, the bankruptcy court applied the following procedure: “[T]he petitioning creditor must establish a prima facie case that no bona fide dispute exists. Once this is done, the burden shifts to the debtor to present evidence demonstrating that a bona fide dispute does exist. Because the standard is objective, neither the debtor’s subjective intent nor his subjective belief is sufficient to meet this burden. The court’s objective is to ascertain whether a dispute that is bona fide exists; the court is not to actually resolve the dispute\textsuperscript{86}.”

As part of this process, Vitro claimed that the “‘…limitation on amount of guaranty’ clause in the indentures subjects their liability to the Petitioning Creditors to a bona fide dispute as to the amount of their debts\textsuperscript{87}.” However, the judge noted that Vitro’s subsidiaries “...expressly guaranteed the full payment of all amounts under the Notes and the Indentures, on a joint and several basis, upon Vitro

\textsuperscript{83} Ibid 20.
\textsuperscript{84} Ibid 21.
\textsuperscript{86} Ibid 5.
\textsuperscript{87} Ibid 5.
SBA’s default...The language of the guarantees is clear, ‘each guarantor hereby irrevocably and unconditionally guarantees jointly and severally, on an unsecured basis, the full and punctual payment of the principal, premium, if any, and interest on and all other amounts payable under each note’...

The bankruptcy court also agreed with a prior ruling that the language in question was a “savings clause” designed to avoid fraud rather than to limit liability. Having dismissed Vitro’s reported bona fide dispute, the court found that “[t]hus, through the determinations of the NY Actions, there is a liquidated amount owed and no bona fide dispute as to amount that removes this claim from involuntary proceedings.”

In addition to the bona fide dispute issue, the bankruptcy court considered several suspicious activities undertaken by Vitro.

- July 2009: Vitro subsidiary and Alleged Debtor transferred assets worth $100 million from the United States to Mexico. “After the fact, despite a total lack of documentary evidence, the transfer was said to have been made for tax purposes.”
- August 10, 2011: Vitro sells all the equity of a subsidiary and Alleged Debtor VVP
- September 2011: Five Vitro subsidiaries and Alleged Debtors reincorporated in the Bahamas

In addition to the activities themselves, Vitro’s opacity was of great concern to the judge. The court was not made aware of the change of ownership of VVP or the Bahamian reincorporation of several entities until October 5, 2012. The extended period of time during which this information was not disclosed appeared to the court to be deliberate, as Vitro “...did not even disclose [the activities] to

---

88 Ibid 7.
89 Ibid 6-7.
90 Ibid 6.
91 Ibid 7-8.
92 Ibid 4-8.
their own counsel. These actions allow for the use of “special circumstances” when evaluating cases under §303. In precedent cases, the bankruptcy court “…found that the exception should apply to preclude the existence of a bona fide dispute when the alleged debtor had participated in fraudulent transfers and pre-petition payments.”

After considering Vitro’s actions and dismissing the firm’s claim of a bona fide, the only remaining stage in the case was for a new ruling. The court “…concludes that orders for relief should be entered against the Alleged Debtors.

Legal Summary

Vitro’s legal saga is a prime example of the heretofore unknown sources of risk that keep bankers awake at night. Through assertive (if questionable) legal tactics, the company was able to maintain independence and even to retain a sizeable equity position. The case called into question not only the specific nature of guarantors, but the fabric of contractual agreement. Multiplicatively, each question had to be asked and answered at least three times: once in Mexico, once to ask the U.S. to measure the Mexican decision, and again in the U.S. with regards to involuntary insolvency.

With the legal issues now decided, Vitro’s fate returns to the hands of the global economy and financial markets. In addition to the exogenous factors that continually shift Vitro’s operating environment, the company’s behavior has undoubtedly altered its perceived riskiness to potential lenders. Moreover, it needs to be seen if the failure of the Mexican bankruptcy process to achieve an

93 Ibid 4-8.
94 Ibid 4-8.
95 Ibid 8.
96 Ibid 9.
outcome familiar to U.S. investors will negatively impact the ability of other Mexican (or more broadly, emerging market) corporations to secure financing at an attractive cost.

Section 3: Z” Score Analysis and Valuation

Z” Score Analysis

In order to evaluate whether the Vitro bankruptcy could have been predicted, we can look at the change over time in the firm’s performance in credit scoring models. We have applied Altman’s emerging market credit scoring system for corporate bonds. The Z”-Score model is an adaptation of the original Z-Score model for U.S. manufacturers. Some key revisions were required to the original model to replace the publicly traded equity requirement and expand the applicability beyond manufacturers.

\[ EM\ Score\ (Z") = 3.25 + 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4 \]

Where \(X_1 = \) working capital/total assets, \(X_2 = \) retained earnings/total assets, \(X_3 = \) operating income/total assets, and \(X_4 = \) book value of equity/total liabilities.

\(X_1\), or working capital/total assets, is a form of liquidity ratio that measures net current assets as a proportion of total capitalization. This measure fell sharply by year-end 2008, when Vitro’s current liabilities rose sharply from USD 655 million to USD 2 billion, and net working capital turned sharply negative.

\(X_2\), or retained earnings/total assets, is a measure of the firm’s ability to fund itself through capitalized profits, rather than through bank debt or public equity or debt markets. Altman has defined the Z”-Score retained earnings calculation as “the sum of past retained earnings plus the value of stock

---

97 Edward Altman, “An emerging market credit scoring system for corporate bonds”, Emerging Markets Review 6 (2005), 311
issuance plus the capital reserve, (the surplus or deficiency on restatement of assets) and finally, the net income (loss) for the current period. We calculated the Z'-Score in two ways, first using the Bloomberg value for Retained Earnings & Other Equity, which includes cumulative undistributed earnings, deferred compensation, cumulative currency translation adjustments, merger reserve, unrestricted equity, revaluation and legal reserves, and is reduced by book value of treasury stock. This calculation produced Z'-Scores and Bond Rating Equivalents nearly in line with the Moody’s senior note ratings over the period. Under this definition of Retained Earnings, Vitro has held an accumulated deficit each year, indicating assets were funded entirely through external capital.

We also calculated the Z'-Score using the Bloomberg Pure Retained Earnings, defined as accumulated earnings, earned surplus, or unappropriated profit that has been retained by the company, and including legal reserves and current year net profit. Z'-Scores using Pure Retained Earnings appear to suggest a much stronger financial position for Vitro than indicated by the Moody’s ratings over the period.

$X_3$, or operating income/total assets, is an indication of the firm’s ability to productively deploy assets to generate income and cash flow. In the case of Vitro, operating income is a consistently low percentage of assets, ranging from 4% to 8% over the period 2002-2011. Further, operating margin is consistently low relative to peers in the Packaging & Container sector. According to Damodaran’s data, industry average EBIT/Sales for 27 firms is 9.63%, but in the period reviewed, Vitro’s operating margin averaged 7.53%, with a low of 5.89% in the filing year 2008. Operating margins appear to be improving, however, with 2011 and 2012 operating margins at 10.45% and 11.52% respectively.

---

98 Ibid, 313
X4, or book value of equity/total liabilities, measures the financial leverage of the company.

Vitro’s financial leverage rose dramatically in 2008, as a loss of $516 million USD sharply reduced equity.

Overall, Z”-Score results (using the Retained Earnings and Other Equity definition) indicated looming financial distress, but only at the end of 2008, two months prior to Vitro’s February 2009 missed interest payment and subsequent derivatives contract and bond default. Indeed, in 2006 and 2007, Z”-Scores under both Retained Earnings definitions indicate improving financial conditions for Vitro. Under the Retained Earnings and Other Equity definition, Vitro’s Z”-Score improved from a B- Bond Rating Equivalent over 2002-2005 to BB in 2006 and BB- in 2007. By the end of 2008, Vitro fell to a Z”-Score of (0.47), and has remained in the Default range ever since.

### Discounted Cash Flow Valuation

<table>
<thead>
<tr>
<th></th>
<th>Dec-11</th>
<th>Dec-10</th>
<th>Dec-09</th>
<th>Dec-08</th>
<th>Dec-07</th>
<th>Dec-06</th>
<th>Dec-05</th>
<th>Dec-04</th>
<th>Dec-03</th>
<th>Dec-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>784.4</td>
<td>786.4</td>
<td>771.8</td>
<td>730.6</td>
<td>1,029.8</td>
<td>809.0</td>
<td>912.8</td>
<td>942.8</td>
<td>791.8</td>
<td>878.5</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>1,885.4</td>
<td>2,234.8</td>
<td>2,108.4</td>
<td>2,039.4</td>
<td>654.8</td>
<td>418.9</td>
<td>778.1</td>
<td>696.9</td>
<td>796.7</td>
<td>873.9</td>
</tr>
<tr>
<td>Total Assets</td>
<td>2,605.5</td>
<td>2,496.1</td>
<td>2,496.1</td>
<td>2,423.2</td>
<td>2,984.8</td>
<td>2,507.6</td>
<td>2,834.5</td>
<td>2,799.9</td>
<td>2,751.8</td>
<td>2,890.6</td>
</tr>
<tr>
<td>X1</td>
<td>(0.42)</td>
<td>(0.58)</td>
<td>(0.54)</td>
<td>(0.54)</td>
<td>0.13</td>
<td>0.16</td>
<td>0.05</td>
<td>0.09</td>
<td>(0.00)</td>
<td>0.00</td>
</tr>
<tr>
<td>RE &amp; Other Equity</td>
<td>(306.9)</td>
<td>(229.6)</td>
<td>(669.4)</td>
<td>(553.2)</td>
<td>(242.6)</td>
<td>(237.5)</td>
<td>(242.3)</td>
<td>(220.8)</td>
<td>(144.8)</td>
<td>(113.7)</td>
</tr>
<tr>
<td>Total Assets</td>
<td>2,605.5</td>
<td>2,496.1</td>
<td>2,496.1</td>
<td>2,423.2</td>
<td>2,984.8</td>
<td>2,507.6</td>
<td>2,834.5</td>
<td>2,799.9</td>
<td>2,751.8</td>
<td>2,890.6</td>
</tr>
<tr>
<td>X2</td>
<td>(0.12)</td>
<td>(0.09)</td>
<td>(0.27)</td>
<td>(0.23)</td>
<td>(0.08)</td>
<td>(0.09)</td>
<td>(0.09)</td>
<td>(0.08)</td>
<td>(0.05)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>EBIT</td>
<td>184.2</td>
<td>116.3</td>
<td>98.6</td>
<td>154.8</td>
<td>247.7</td>
<td>179.5</td>
<td>148.3</td>
<td>139.2</td>
<td>171.3</td>
<td>190.0</td>
</tr>
<tr>
<td>Total Assets</td>
<td>2,605.5</td>
<td>2,496.1</td>
<td>2,496.1</td>
<td>2,423.2</td>
<td>2,984.8</td>
<td>2,507.6</td>
<td>2,834.5</td>
<td>2,799.9</td>
<td>2,751.8</td>
<td>2,890.6</td>
</tr>
<tr>
<td>X3</td>
<td>0.07</td>
<td>0.05</td>
<td>0.04</td>
<td>0.06</td>
<td>0.08</td>
<td>0.07</td>
<td>0.05</td>
<td>0.06</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Book Value of Equity</td>
<td>209.2</td>
<td>48.7</td>
<td>151.7</td>
<td>223.6</td>
<td>859.1</td>
<td>821.1</td>
<td>784.3</td>
<td>730.9</td>
<td>770.8</td>
<td>828.0</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>2,396.2</td>
<td>2,447.4</td>
<td>2,344.5</td>
<td>2,218.7</td>
<td>2,089.2</td>
<td>1,686.4</td>
<td>2,050.3</td>
<td>2,069.0</td>
<td>1,981.0</td>
<td>2,062.6</td>
</tr>
<tr>
<td>X4</td>
<td>0.09</td>
<td>0.02</td>
<td>0.06</td>
<td>0.10</td>
<td>0.41</td>
<td>0.49</td>
<td>0.38</td>
<td>0.35</td>
<td>0.39</td>
<td>0.40</td>
</tr>
<tr>
<td>Z” (RE &amp; Other Equity)</td>
<td>0.66</td>
<td>(0.52)</td>
<td>(0.80)</td>
<td>(0.47)</td>
<td>4.81</td>
<td>4.95</td>
<td>4.04</td>
<td>4.27</td>
<td>3.89</td>
<td>4.00</td>
</tr>
<tr>
<td>Bond Rating Equiv.</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>BB-</td>
<td>BB</td>
<td>BB-</td>
<td>B-</td>
<td>B-</td>
<td>B-</td>
<td>B-</td>
</tr>
</tbody>
</table>

| Z” (Pure Retained Earnings) | 0.70  | (1.26) | (0.79) | (0.46) | 7.24   | 7.75   | 6.44   | 6.26   | 5.95   | 6.08   |
| Bond Rating Equiv. | D     | D      | D      | AA-    | AA+    | A-     | BBB+   | BB     | BB     | BB     |
| Moody’s (Senior Notes) | WD    | WD     | WD     | Caa1   | B2     | Caa1   | Caa1   | B2     | B1     | NA     |
| Standard & Poors | NR    | NR     | NR(1)  | B-     | B      | B-     | B     | B+     | B+     | NA     |

(1) Please note that, during 2009 S&P took its B- rating to a CC rating in January, a D rating in February, and by March had withdrawn its rating completely.
We performed a discounted cash flow valuation for Vitro as a going concern, assuming that it will resolve its bankruptcy proceedings and complete its reorganization in 2013. Our DCF analysis values Vitro’s projected operations and the company as a perpetuity. Given the unavailability of management pro forma projections post-restructuring, we have formulated projections using assumptions around future revenues, margin improvements, and cash flow improvements.

1) Cost of Capital / Discount Rate

(Note: all inputs for the Cost of Capital calculation are from Professor Damodaran research\textsuperscript{100})

In order to estimate Vitro’s cost of equity, we began with a debt/equity ratio of comparable firms. Professor Damodaran’s research on industry-specific levered betas indicates a levered beta for the global Packaging & Container industry (399 firms) of 0.92. Using the global Packaging & Container industry average debt/equity ratio of 63% and global Packaging & Container industry average tax rate of 17.17%, we estimate the Hamada unlevered beta at 0.60, using the standard levered beta calculation:

\[
\beta_U = \frac{\beta_L}{\left[1 + (1 - T)(\frac{D}{E})\right]}
\]

We adjust for industry average cash to firm value of 6.94% per the formula:

\[
\beta_{Adjusted} = \frac{\beta_{Unadjusted}}{\left(1 - \frac{Avg.\ Cash}{Firm\ Value}\right)}
\]

We arrive at an estimated unlevered beta for the Packaging & Container industry of 0.65.

\textsuperscript{100} Aswath Damodaran,”Levered and Unlevered Betas by Industry – Global”, http://www.stern.nyu.edu/~adamodar/pc/datasets/betaGlobal.xls
### Calculation of Unlevered Beta

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levered Beta (Industry)</td>
<td>0.92</td>
</tr>
<tr>
<td>Tax Rate (Industry)</td>
<td>0.17</td>
</tr>
<tr>
<td>Debt / Equity Ratio (Industry)</td>
<td>0.63</td>
</tr>
<tr>
<td>Unlevered Beta</td>
<td>0.60</td>
</tr>
<tr>
<td>Average Cash/Firm Value (Industry)</td>
<td>0.07</td>
</tr>
<tr>
<td>Unlevered Beta adjusted for cash</td>
<td>0.65</td>
</tr>
</tbody>
</table>

We then calculate a re-levered beta for Vitro reflecting the firm’s Debt/Equity Ratio and Effective Tax Rate at year-end 2012.

### Calculation of Relevered Beta

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitro Debt/Equity Ratio</td>
<td>2.65</td>
</tr>
<tr>
<td>Vitro Effective Tax Rate</td>
<td>0.08</td>
</tr>
<tr>
<td>Re-levered Beta</td>
<td>2.22</td>
</tr>
</tbody>
</table>

We apply the Capital Asset Pricing Model to find the levered cost of equity for Vitro’s operations. Applying a risk free rate of 1.76% (10 yr Treasury as of December 2012) and the Equity Risk Premium for Mexico of 8.05%, we arrive at a cost of equity of 19.64%.

### Calculation of Cost of Equity

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Free Rate (10 yr U.S. Treasury) in Dec 2012</td>
<td>1.76%</td>
</tr>
<tr>
<td>Equity Risk Premium (Mexico)</td>
<td>8.05%</td>
</tr>
<tr>
<td>Vitro Re-levered Beta</td>
<td>2.22</td>
</tr>
</tbody>
</table>
Next, we calculate the Cost of Debt using the Risk Free Rate, combined Vitro and Mexico default spread, and the Mexican marginal tax rate.

**Calculation of Cost of Debt**

- **Risk Free Rate (10 Yr U.S. Treasury) in Dec 2012**: 1.76%
- **Default Spread (Vitro and Mexico)**: 3.00%
- **Pre-Tax Cost of Debt**: 4.76%
- **Mexico Tax Rate**: 0.30
- **After-Tax Cost of Debt**: 3.33%

Finally, we use our Cost of Equity and Cost of Debt to calculate the Weighted Average Cost of Capital for Vitro, or the discount rate for firm valuation purposes.

**Weighted Average Cost of Capital**

- **Cost of Equity**: 19.64%
- **Cost of Debt (After-Tax)**: 3.33%
- **Market Capitalization (in USD)**: 434.20
- **Total Debt (in USD)**: 1,148.90
- **Firm Value (in USD)**: 1,583.10
- **WACC**: 7.81%

2) Value of Operations
To estimate the value of Vitro’s operations, we applied a short-term growth rate of 5% to Vitro’s 2012 revenue and projected future revenue over the period 2013-2016. The 5% growth assumption is based on the compound annualized growth rate (CAGR) of trailing revenue from 2010 ($1,591 million) to 2012 ($1,758 million).

The value of Vitro’s operations is highly sensitive to operating margin assumptions. Given Vitro has shown tremendous improvement in operating margin in recent years (from 5.89% in 2008 to 11.02% in 2011), we feel an average margin would not reflect the company’s improved operations going forward. Therefore we apply the 2011 operating margin of 11.02% to derive future projected Earnings Before Interest and Taxes.

We believe Vitro’s growth in sales will require net investment in capital expenditure to grow net fixed assets and productive capacity. In order to represent this investment, we derived capital expenditure and depreciation charges required to reduce Vitro’s Revenue/Net Fixed Assets and bring this metric in line with historical levels of 1.7 times while growing sales.

Depreciation is assumed to be 8.8% of previous year-end Net Fixed Assets, reflecting historical average levels, resulting in annual depreciation charges averaging approximately $100 million. Capital Expenditure is then scaled up from 2013 to 2016, from $110 million to $160 million, to reflect required net investment. Throughout the period, Revenue/Net Fixed Assets is maintained at the 1.7x level, just above the historical average.

We examined Vitro’s history of modified Net Working Capital (current assets minus current liabilities, excluding interest-bearing assets and interest-bearing debt\(^{101}\)) to derive an assumed change in Net Working Capital for the projected operations. However, high volatility in the level of Net Working Capital makes such a projection difficult. In the pre-2008 period, Vitro maintained

---

average modified Net Working Capital of approximately 12.6% of revenue. We assume Vitro will need to aggressively grow modified Net Working Capital in 2013-2015 to return to a 12.6% NWC/Revenue level in 2015. 2016 and beyond increases to modified Net Working Capital are tied to growth in revenue.

Applying our cost of capital of 7.81%, the discounted present value of projected free cash flows over the period 2013 to 2016 is $276 million. We have included a breakdown of our calculations below.

3) Terminal Value

To derive a terminal value for Vitro’s operations, we applied the Free Cash Flow (FCF) CAGR of 9% over the period 2013-2016 to the average FCF over the same period ($78 million) to derive a terminal FCF of $85 million. We applied a perpetuity growth rate of 2% to estimate the terminal value, roughly in line with current U.S. 10-year Treasury yields. Discounting this 2016 perpetuity to present value produces a terminal value of $1,163 million.

The combined Firm Value of Vitro’s operations is $1,439 million.
4) Scenario Analysis

The biggest risks to our valuation are that:

1) Vitro fails to grow revenue over the period 2013-2016;

2) Investors demand a higher return than our weighted cost of capital of 7.81%; and

3) 2011 operating margin improvement to 11.02% is not sustainable.

We believe our assumptions are appropriate and that a resulting $1,439 million firm value is reasonable. We view the worst case firm valuation of Vitro to be $900 million to $1,200 million if revenue fails to grow from distressed period levels, or if operating margins return to distressed period levels.

**EBITDA Multiple Valuation**

<table>
<thead>
<tr>
<th>No. of firms</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV/EBITDA</td>
<td>5.93</td>
<td>6.53</td>
<td>9.80</td>
<td>7.58</td>
<td>6.35</td>
<td>7.82</td>
<td>7.33</td>
</tr>
</tbody>
</table>

Vitro EBITDA<sub>2012</sub> $269.10
Implied EV $1,973.39

According to Damodaran’s research, Packaging & Container firms in Latin America were priced by the market at an average Enterprise Value to EBITDA multiple of 7.33x<sup>102</sup>. Applying this multiple to Damodaran’s 2012 EBITDA for Vitro of $269 million, we derive an implied Enterprise Value of $1,973

---

<sup>102</sup> Aswath Damodaran, “Individual Company Information – Emerging Markets”
million. We feel this analysis may result in overvaluing Vitro’s Enterprise Value, given that it does not include implicit costs and challenges arising from Vitro’s bankruptcy and reorganization.

Reorganization Plan

Our analysis estimates firm value for Vitro between $1.2 billion and $1.5 billion. Under the terms of the original reorganization plan submitted in the Mexican Concurso, Old Note holders, with aggregate debt holdings of approximately $1.2 billion, would receive $815 million in new notes maturing in 2019, $96 million in new convertible debentures, and $50 per $1,000 of principal of Old Notes (5% of principal, or $60 million in aggregate). This combined value of $971 million, representing a roughly 19% haircut to 81 cents on the dollar, approaches what we believe to be a fair distribution for creditors, considering our estimates for the firm’s enterprise value.

Under the absolute priority rule of U.S. bankruptcy law, bondholders may be haircut if firm value falls below the value of outstanding indebtedness. Any equity outstanding should be extinguished before haircuts are applied to debt. Further, in the event debt is haircut, under no circumstances should the pre-reorganization controlling shareholder retain control and $500 million of pre-bankruptcy equity value. Our valuation of operations of $1.4 billion, relative to outstanding Vitro consolidated third party debt totals of $1.7 billion (not including questionable inter-company loans), suggests a bondholder haircut to at least 85 cents on the dollar, and elimination of all outstanding equity.

A fair distribution would have seen the intercompany obligations unwound and extinguished. Pre-bankruptcy third party debt could have received a combination of new notes and equity totaling the post-reorganization valuation. We would suggest that the outstanding $1.7 billion of third party debt be retired. We have assumed a value of operations of $1.44 billion. Under this valuation assumption, we suggest issuing new notes totaling $560 million to debt holders, along with new equity totaling $880
million. Under this reorganization plan, pre-bankruptcy equity holders would be eliminated, and the post-reorganization Vitro would adopt an industry-average leverage ratio.

In corporate restructurings, debtholders may have little experience operating the businesses in which they have invested. Vitro’s primary debtholders are U.S. hedge funds. In an ordinary restructuring, they may prefer to keep the original owners or management in place to benefit from their operating expertise. In the Vitro case, however, clear corruption and deception on the part of management likely precludes any amicable reorganization in which both debtholders and management/owners work together. Therefore bondholders may prefer either a sale of their Vitro interests to a third party, or a cash payment on their outstanding bonds that represents a haircut smaller than the 81 cents on the dollar proposed under the original reorganization plan.

As discussed earlier, Vitro’s U.S. creditors recently agreed to a plan proposed by Fintech to acquire outstanding bonds held by U.S. creditors for 85.25 cents on the dollar, plus an additional payment for fees and expenses incurred. This payout appears to offer fair value to creditors given the value of Vitro’s operations relative to outstanding indebtedness. This compromise may signal a desire on the part of U.S. creditors to exit their positions and a protracted legal battle with what is most likely still an adequate return, or at least a preservation of the initial investment.

The Vitro case provides an unprecedented view of navigating bankruptcy court in an environment riddled with potential stumbling blocks such as the appropriate treatment of the rulings of foreign courts and different perspectives on creditor treatment and comity. The Vitro bankruptcy proceedings will no doubt have a severe impact on U.S. creditors’ confidence in United States bankruptcy court enforcement orders involving foreign courts. The rejection of comity in this high profile case may have a lasting impact on the availability, cost, and terms of financing to Mexican corporations. If the deficiencies of the LCM are not addressed, foreign lenders may be unwilling to lend
to Mexican companies. By limiting the capital available, the cost of capital will increase, making economic growth more difficult. By attempting to maximize short term wealth, the Vitro ownership may have done their company, industry, and nation a grave disservice. The Mexican system should address these shortcomings in order to gain credibility in the international marketplace, thereby encouraging foreign investment.