Appendix 4. Case Studies of MSME NPL Workout

Case Study #1: Printer Ink, Ltd. - Loan Restructuring

Background

Printer Ink, Ltd. ("PI") manufactured and sold reusable ink cartridges for use in home and office printers throughout Slovenia and the neighboring countries. The company prospered under the direction of its sole owner, Mr. Black, and in December, 2012 Bank B loaned the company EUR 1.066.000 to fund its growth and purchase new equipment. The loan was payable in 59 monthly installments of EUR 16.666 and a final installment of EUR 82.706 plus interest at 6 percent. The loan is secured by a mortgage on real estate, as well as pledges over furniture, fixtures and equipment. Sales began to drop in mid-2013 as the economy began to slip into recession. Mr. Black took some modest steps to cut expenses but expecting that the downturn would be short-lived, held off on making sharper cuts. Sales and profits continued to fall throughout 2014 and the company reported a loss on its 12/31/14 year end statements, the first in its ten-year history. The balance of the term loan as of March 1, 2015, is EUR 632.684 with the next monthly installment of EUR 16.666 plus interest of EUR 3.163 due on March 31, 2015.

Since the inception of the loan, Mr. Black had made it a habit to meet with the bank on a quarterly basis. On March 6, 2015, he called to schedule the next meeting. During the conversation with his loan officer, Ms. Brown, Mr. Black warned her that the company would show a loss, and would need a waiver of its debt to EBITDA and quick ratio covenants as well as some "short-term payment relief" to allow the company to adjust to its reduced sales levels. Ms. Brown suggested meeting at 9am, on Monday, March 9.

In preparation for the meeting, Mr. Black began to prepare a set of projections to support his request for relief. But the more he worked, the more worried he became. No matter how he changed the assumptions, the company would not report a profit until August 2015 and by that time it would have run out of cash. It was with a heavy heart, that he headed to meet with the bank.

Transfer to Workout Unit

When he arrived for the meeting, Mr. Black was surprised to see that his loan officer, Ms. Brown, was accompanied by another officer whom he had not met before. Ms. Brown began the meeting by introducing Mr. White, from the Workout Unit. She explained that the bank's Early Warning System was designed to detect problems at an early stage when they are most correctable. PI had been on the Watch List for the past year because of its declining sales, rapid rise in debt to EBITDA ratio and increases in accounts receivable, inventory and payable days outstanding. Although the company's loan is not past due, the decision has been made to transfer the loan to the Workout Unit due to its continued deteriorating financial condition which has resulted in losses and covenant defaults as well as Mr. Black's admission that it will be unable to continue to service its debt. After wishing Mr. Black well, Ms. Brown left the meeting.

Although a bit offended as Mr. Black considered his company to be an excellent customer of the bank, he began by reviewing the 2014 results. Mr. Black was pleasantly surprised to find that Mr. White was well prepared and quite knowledgeable about the company. He asked good questions and spent the time to get behind the figures and the projections. He even made a couple of helpful suggestions to improve the company's performance. As the meeting concluded, Mr. White promised to review the projections in depth and while being careful not to make any promises, agreed to try to develop a solution which would allow the company to survive.

Financial and Business Viability Analysis

Table 1: Selected Financial Indicators of PI

INDICATORS	12/31/13	12/31/14	Projected Sustainable Cash Flow
Profitability Indicators (EUR 000)			
EBITDA	190	84	120
Operating profit	74	-33	31
Net profit	59	-33	25
Liquidity			
Quick Ratio	1,32	1,19	--
Solvency			
Debt to worth	1,52	1,17	
Bank debt to EBITDA	4,5	7,9	3,3
Interest coverage	2,16	1,86	1,89
Efficiency			
Accounts receivable days	62	95	--
Accounts payable days	89	95	--
Inventory turn days	135	120	--

Mr. White began his analysis by duly noting that PI, like most borrowers, had experienced a sharp decline (some 20 percent) in sales in 2014. This, coupled with an inability to adjust cost of goods sold or selling, general and administrative expenses, quickly enough resulted in a EUR 33.000 loss for the year. Liquidity declined reflecting the liquidation of current assets to fund operating losses. Leverage was up as the company was forced to rely on suppliers to fund its operating needs.

Turning to the projections, Mr. White believed that they were both conservative and realistic. The projections assumed slightly decreased sales for the next 3 years which was in line with the Bank's own internal economic forecasts. Although the company would not become profitable until August 2015, it would remain profitable thereafter as the many cost reductions instituted by Mr. Black were fully implemented. EBITDA would also remain stable in line with the lower sales levels. Although Mr. Black had requested an additional short term loan of EUR 100.000, Mr. White believed that by reducing annual debt service and careful cash management the company would not need any additional funding. After carefully reviewing the bank's assumptions, Mr. Black concurred.

During their meetings, Mr. White had been very impressed with Mr. Black's knowledge of the company and recognition of the steps needed to turn it around. He was known in the business community as a conservative business man, was well liked by his employees, and maintained close relationships with both his customers and suppliers. While a small player in a much bigger market, the company had an excellent reputation and maintained a diversified customer base, many of which were the local affiliates of large international companies. Industry projections were in line with those of the company – essentially flat sales for the next three years, followed by modest growth thereafter.

Based on the above, Mr. White felt that the company's problems were more temporary in nature and that there was a basis to proceed with restructuring the loan.

Restructuring the loan

Mr. White began the restructuring process by reviewing the bank's restructuring guidelines. They recommended a tenor not to exceed five years, EBITDA of at least 110 percent of principal and interest, a maximum rate of 6 percent, and monthly payments of principal and interest with no moratorium on payments. With a sustainable cash flow of EUR 120.000, the most the company could afford to pay on an annual basis was EUR 109.000. As it was the Bank's policy not to waive accrued interest outstanding on its loans, Mr. Black agreed to liquidate his sole remaining savings account to bring the interest current (EUR 3.163) as of December 31, 2014. These funds will be loaned to the company and will be fully subordinated to the bank debt.

Given these parameters, Mr. Black began to calculate what level of debt the company could repay over five years. It quickly became clear that PI would not be able to repay its outstanding debt in full over a five-year period as the principal payments alone would amount to EUR 126.536 per year. He then began to reduce the debt in EUR 50.000 increments until he reached EUR 433.000. Principal payments together with interest at 6percent would total EUR 109.982, slightly above the EUR 109.000 maximum target. Mr. Black was unwilling to recommend that the bank forgive the remaining EUR 199.684 balance on the loan at this time. He, therefore, recommended that the existing debt be split into two loans, both secured by a mortgage on the land and building, as well as pledges over furniture, fixtures, and equipment. The first loan, or the "A" loan, would be in the amount of EUR 433.000 and would be payable in 60 installments of EUR 7.250 plus interest at 6 percent. The remaining balance of EUR 199.684, would be placed on the "B" note, at 0percent interest and a bullet maturity of five years. To ensure Mr. Black's continued cooperation, the bank would agree in a new master restructuring agreement that the B note will be forgiven if the A note is repaid in accordance with its terms.

All loans will be governed by a master restructuring agreement which will contain covenants restricting dividends and other withdrawals by Mr. Black, require a monthly cash budget together with quarterly financial statements, the maintenance of debt service coverage at all times of at least 1.1 and provide that EBITDA above EUR 130.000 be applied to the "A" note until it is paid. The master restructuring agreement covenants would also specify that the "B" note was not to be used in the calculation of the financial leverage covenants.

Evaluating workout options

After deciding on the parameters of the restructuring, Mr. White began to calculate the NPV of the various workout options open to the bank. Neither Mr. White nor the Legal Officer considered enforcement to be a good alternative to pursue. Mr. Black would likely be uncooperative and the bank could expect at least one appeal and several postponements. It was likely therefore that the bank would not receive any proceeds for a three-year period. Also as the continued use of their collateral was essential for the company to operate, it was likely that either the company or other creditors would put the company into a bankruptcy proceeding before the bank could file an enforcement proceeding. Nevertheless, he began by considering the value of the collateral in both a bankruptcy and enforcement scenario.

The loan was secured by a mortgage on the land and building as well as pledges over furniture, fixtures and equipment. A new appraisal prepared by an internal appraiser valued the land and building at EUR 450.000, Mr. White applied a 10 percent discount to reflect the forced sale nature of the bankruptcy proceeding and then took a further 10 percent discount to reflect further deterioration during the extended period necessary to conclude the enforcement process. The bank had also received a new appraisal of the furniture, fixtures and equipment. Mr. White believed that in a bankruptcy proceeding, the furniture and fixtures, valued at

EUR25.000, would sell for 10percent of appraised value and the equipment (valued at EUR75.000) at 50 percent of its appraised value. As above, he also discounted these values by an additional 10 percent to reflect that an enforcement proceeding takes a year longer than bankruptcy. Total liquidation values of the bank's collateral expected from bankruptcy and enforcement procedures are shown in Table 1 below.

Table 1: Estimated value of collateral in bankruptcy and enforcement proceedings

Collateral	**Appraised Value (EUR)**	**Estimated Sale Value (EUR) Bankruptcy**	**Estimated Sale Value (EUR) Enforcement**
Land and building	450.000	405.000	364.500
Furniture & Fixtures	25.000	2.500	2.250
Equipment	75.000	37.500	33.750
Total	550.000	445.000	400.500

Mr. Black noted that in a bankruptcy proceeding the bank would not receive the full value of its claim (EUR 632.684) from the sale of its collateral. The shortfall of EUR 187.684 would be considered to be an unsecured claim.

He then proceeded to calculate liquidation value of the remaining assets of the company as shown below.

Table 2: Estimated Liquidation value of PI's assets (excluding bank's collateral)

Asset	**Book Value 12/31/144 (EUR 000)**	**Percentage Recovery**	**Liquidation Value (EUR 000)**
Cash	5	100 percent	5
Accounts receivable			
0-30 days outstanding	100	.80	80
30-60 days outstanding	50	.60	30
Over 60 days outstanding	203	.10	20
Total accounts receivable	363		136
Inventory			
Finished goods	100	.50	50
Work in process	77	N/A	0
Raw materials	16	.75	12
Total inventory	193		62
Total Assets	**561**		**203**

He then calculated the cost of a bankruptcy proceeding (EUR 54.102) as follows:

- *Court fees*: an advance fee of EUR 3.434,50 for all filings (debtor and creditor).

- *Publication fees*: EUR 120 to cover for the publication in the official gazette the opening of the bankruptcy case.

- *Administrator*: Total remuneration is based on 3 components: (i) value of the estate, (ii) number of creditors, and (iii) proceeds distributed to creditors. For the purposes of this case, the estate is valued at EUR 1.487.000, there are 10 creditors, and distribution proceeds equal EUR 648.000.

The remuneration of the administrator would be EUR 5.547,50, calculated as follows: EUR 23.687 for opening report; EUR 1.420,50 for testing claims; and EUR 25,440 for distribution of proceeds.

Thus, in a bankruptcy proceeding the bank would receive a total of EUR 489.669,40, of which EUR 445.000 represents the proceeds from liquidation of the bank's collateral and EUR 44.669,40 for its unsecured claim. Mr. White then calculated the NPV of the various alternatives using the bank's standard 7percent discount rate. Based on this analysis, restructuring was the best alternative.

Table 3: NPV Analysis of workout options

	NPV	**2015**	**2016**	**2017**	**2018**	**2019**
Restructuring	**411**					
EUR 433K Term Loan						
Principal		87	87	87	87	87
Interest		23	16	13	8	3
Total Recovery		**110**	**103**	**100**	**95**	**90**
Bankruptcy	**400**					
		-	-	**490**		
Enforcement	**343**					
		-	-	-	**450**	

The discussion at the Credit Committee proved lively as anticipated. Many members questioned why the Bank was willing to forgive the B note; others questioned why Mr. White did not just extend the maturity until the loan was fully paid. Many felt that the Bank would be better served by allowing the company to file for bankruptcy. Mr. White defended his decisions, pointing out that without the restructuring the company was certain to fail resulting in the loss of 23 jobs and that the projections showed no ability to service the full amount of the loan on a fully performing basis. The proposed restructuring would allow the A loan to be returned to a performing status if the company met the repayment terms for one year. The loan agreement also contained a cash flow recapture clause that would require all cash flow in excess of EUR 130.000 to be applied as a prepayment to the A note. In addition, he was concerned that Mr. Black would lose his incentive to work with the bank as the loan now exceeded the value of the collateral and future growth was severely limited. Once everyone had a chance to speak, the head of Credit Risk Management spoke in favor of the loan restructuring. He reminded the Committee of the Bank's commitment to work with cooperative borrowers and to restructure loans whenever possible. He pointed out the Mr. Black was a long-term customer of the bank; had a successful track record as a businessman; and had always fully cooperated with the bank. Based on these facts, he believed that PI had earned the chance to restructure.

Lessons learned

Upon reflection, Mr. White felt that the PI case contained several important lessons, including:

- *The importance of the EWS and prompt transfer to the workout unit*. The EWS had correctly identified potential problems a year earlier as sales began to decline. Unfortunately, Mr. Black was unable to cut back quickly enough to avoid losses. But the mandatory transfer of the loan to the Workout Unit after it had been on the Watch List for a year (and before it became past due) allowed the bank and the borrower to develop a solution before the company was totally out of cash.
- *The importance of working with a co-operative borrower*. Mr. Black's history of working closely with the bank, coupled with his pro-active approach to instituting corrective actions within the company, gave the bank confidence that he was able to manage the turn-around process within the company. This proved to be a key factor in determining the bank's willingness to move forward with restructuring the debt of an admittedly marginally viable borrower.
- *The importance of recognizing when debt is unsustainable*. While it was true that the bank could have just extended the maturity of the loan to accommodate full repayment, it would have done nothing to improve the company's fundamental problem of over indebtedness. The company would have continued to struggle and there was a high likelihood that it would eventually collapse. It was also unclear if Mr. Black's high level of cooperation would continue if he could not see some light at the end of the tunnel in the form of modest growth and an improved financial position. By its willingness to forgive a portion of the debt conditioned upon the repayment of the A loan, the bank has addressed both problems – the debt has been reduced to a sustainable level and Mr. Black has been provided with a powerful incentive to ensure that the company performs as projected. The restructuring also sent a strong signal to the community at large that the bank was willing to work with cooperative borrowers and was committed to saving viable businesses.

Case Study #2: Multi-Bank Loan Restructuring – Atlas Battery Company, Ltd.

Background

Atlas Battery Company, Ltd. ("ABC") was a small manufacturer of battery cables and related products, over 90% of which were sold to distributors. The company, which employed 45 people, had been profitable since its founding in 2003. It had an excellent reputation for the quality of its products, particularly its heavy-duty cables used primarily in construction equipment, and was known for maintaining close relationships with its suppliers and distributors.

ABC maintained a lending relationship with three banks. First Bank, considered to be its primary bank, extended a EUR 50.000 line of credit for working capital secured by pledge of accounts receivables. Advances under this line, however, were limited to the lessor of EUR 50.000 or 80 percent of accounts receivable under 60 days (the "borrowing base"). Second Bank had recently reduced its EUR 45.000 line of credit for equipment purchases to EUR 35.000 and reduced the tenor of its facility from seven years to five. This amount was currently outstanding on the line secured by a pledge of various vehicles such as trucks, cars, forklifts, etc. In most cases, Second Bank financed 100percent of the original cost of the equipment. Finally, in January 2012, Third Bank had extended a EUR 50.000 loan to finance 100percent of the cost of vacant land on which the company was considering building a small warehouse (the company owned no other real estate, preferring to rent its facilities.) The property was pledged as collateral to the loan. All loans bore interest at 5percent and were guaranteed by the owner, Mr. Atlas.

Transfer to Workout Unit

The company had been put on the Watch List of First Bank early in the first quarter of 2012 due to the slowing collection of accounts receivable as reported in the monthly borrowing base certificate it was required to submit to First Bank to establish the amount that the company could borrower during the month. At that time, First Bank's account officer believed the problems were temporary in nature due to some slowness in collecting receivables from one of the largest distributors. In March 2012, however, ABC's management informed First Bank that the problems were more serious and stemmed from the recent production of a large number of defective cables. The company had traced the cable problems to faulty materials from one of its suppliers, a major chemical company. The company had moved aggressively to recall and replace the defective product. ABC estimated that it would cost EUR 25.000 to correct the situation and believed the cost would be covered by a warranty in the purchase contract covering quality and production specifications. However, it likely would require legal action, and it could be some time before the monies were recovered.

As the company struggled to recover from its production problems, sales began to fall as the general economic downturn began to take hold. The company's liquidity tightened as many of the distributors requested and received extended payment terms on their outstanding invoices. In addition, the company was experiencing additional costs to correct the defective cables. By September 2012, the company was reporting small losses on its monthly statement, experiencing periodic cash shortages and consistently running 30 – 60 days past due with each its lenders. Throughout this period, the company had kept First Bank fully informed of the situation as it developed. The loan officer considered increasing the loan but after discussion with his manager decided to wait until the bank received ABC's 2012 year-end statements at which time they would be in a better position to assess the company's viability. When First Bank's EUR 50.000 loan became 90 days past due on January 1, 2013, the loan was automatically transferred to the Workout Unit.

Organizing the other creditors

Mr. Williams, First Bank's workout officer, thoroughly reviewed both the credit and collateral files to familiarize himself with the company and to determine that the bank had properly perfected its collateral position. He then met with Mr. Atlas, the owner of ABC. Mr. Atlas was visibly upset and placed part of the blame for the company's current situation on the consistently slow response of the former account officer. He felt that if First Bank had revised the borrowing base and increased the company's line in a timely manner, ABC would have been able to manage its cash to avoid the current cash shortfall. Instead, ABC was now in default with each of its lenders, Second Bank was threatening to begin enforcement proceedings and he was facing the liquidation of his company, the loss of his livelihood, and having to terminate his employees, many of whom had worked for the company from its founding.

Mr. Williams assured Mr. Atlas that First Bank was committed to working with cooperative borrowers whose businesses were viable. But this required the borrower to recognize that the bank also had a valid problem – namely a non-performing loan. If the borrower was to survive, the bank needed to clearly identify the problem and devise a solution that would correct, not just postpone, the problem. Mr. Williams then asked if Mr. Atlas had heard of the recently published guidelines for corporate restructuring of MSME loans. Mr. Atlas recalled hearing something about them but really did not know what it was about. Mr. Williams explained that the Guidelines required that in cases where the borrower had multiple lending relationships, the banks work together to find a mutually agreeable solution. As ABC's primary bank, First Bank was willing to act as the coordinator, convene a meeting of the banks and request that the banks grant ABC a 60-day moratorium to give the company time to produce its 2012 year-end statements together with a detailed cash flow projection, and to negotiate a restructuring of all its loans. But to do so, the banks would require that Mr. Atlas agrees not to take any actions that would harm the banks' position during the moratorium; submit a detailed weekly cash budget; and agree to a comprehensive third-party review of the recent production problems to assure the banks that the problems had been fully identified, corrected, and all costs accounted for. Mr. Atlas readily agreed to the proposal.

As promised, Mr. Williams contacted the account officer at each of the other two banks and they agreed to meet the following day. In preparation for the meeting, Mr. Williams reviewed what little information was available in the credit file about ABC's other banking relationships and thinking about their likely positions. Second Bank lent primarily for the purchase of vehicles and for some time had been willing to finance 100percent of the cost of the purchased assets. They had lent to ABC for over five years but had cut back ABC's line of credit and shortened its tenor from seven to five years within the past year and reduced the amount of its line from EUR 45.000 to its current level of EUR 35.000. It was unknown if this was because of concerns about ABC's performance or part of a strategic move on the bank's part to reduce exposures in view of the economic downturn. Recently they had gained a reputation in the market place for being generally uncooperative and pressing for payment rather than restructuring. Mr. Williams had heard of several situations in which the other banks had paid them out so that a restructuring could proceed. As for Third Bank, it was a newer bank that aggressively sought ABC's business in hopes of ultimately becoming the company's primary bank.

The initial creditors' meeting progressed along the lines envisioned by Mr. Williams. Both Second and Third Bank expressed their unhappiness with the borrower. Third Bank, in particular, felt they had been misled by ABC as the defective cable problem was discovered only days after their loan had been closed. Second Bank stated several times that the meeting was a waste of time as they simply wanted to be paid and were going to move to enforce their collateral. Mr. Williams then took control of the meeting and reminded everyone that they had a common problem – the company could not pay at the moment and each bank would likely experience a loss of some magnitude if the company were liquidated today. Unlike many of their borrowers, ABC had a long history of profitability and if the cable problems had been corrected, there was no reason to suspect that they would not be profitable in the future. He, therefore, recommended that they enter a 90-day moratorium with the company to allow them to produce their 2012 year-end statements together with detailed cash flow projections showing how the loans would be repaid. He also recommended an independent assessment to verify that the cable problems had been corrected. After a lengthy discussion, the banks agreed with this proposal, subject to Second Bank's requirement that the moratorium be limited to 60 days and that the company produce a cash budget to be approved and monitored by the banks. (Mr. Williams had purposely suggested a moratorium period of 90 days and withheld proposing the cash budget requirement to allow the other banks to make the recommendation so that they could feel ownership in the process.). Mr. Williams agreed to take the proposal back to ABC.

During the moratorium period, Mr. Williams worked closely with the company and its accountants to ensure that he fully understood the company's financial position and projections. ABC hired the independent expert, acceptable to the banks, to evaluate the cable problems. Mr. Williams kept the other banks fully informed regarding his discussions with the company and the independent expert. First Bank, along with the other banks, received the company's 12/31/12 financial statement together with the projections and the consultant's report. 45 days after the first creditors' meeting.

Financial and business viability analysis

Table 1: Selected Financial Indicators of ABC

	12/31/11	12/31/12 Actual	12/31/12 Adjusted	Projected Sustainable Cash Flow
Profitability Indicators (EUR 000)				
EBITDA	40	10	27	40
Operating profit	32	(54)	23	20
Net profit	28	(54)	17	19
Liquidity				
Quick Ratio	1.32	1.03		--
Solvency				
Debt to worth	2.37	3.23	N/A	
Bank debt to EBITDA	3.1	N/A	4.9	3.5
Interest coverage	5.7	N/A	3.7	2.2
Efficiency				
Accounts receivable days	55	95		--
Accounts payable days	58	85		--
Inventory turn days	120	135		--

As expected, ABC showed a small loss for 2012. Mr. Williams, however, was pleased to see that it was lower than he had expected and that when he adjusted the statements to remove the costs related to the defective cables (which had risen from the originally projected amount of EUR 25.000 to EUR 77.000) from the results, the company was profitable and had a positive EBITDA. The projections showed that the company would continue to be profitable and cash flow available for debt service would remain stable at EUR 39.000. However, it would require an additional EUR 25.000 to bring several suppliers current.

The independent expert's report confirmed that the cable problems had been corrected as well as the need for the additional borrowing. The expert had also talked with ABC's distributors who confirmed that they were satisfied with the company's handling of the problem and they planned to continue doing business with the company, albeit at a lower volume given the business downturn. His report also confirmed that

ABC's cables were considered to be the premier cable for use in construction equipment. In addition, Mr. Williams had asked the Workout Unit's legal officer to review the status of the company's warranty claim against the supplier of the defective material. He confirmed that ABC seemed to have a strong case. The supplier had recently made a settlement offer in the range of EUR 25.000 which ABC considered to be too low. The two sides were in negotiations to see if a settlement could be reached before resorting to legal proceedings. The legal officer believed that the case was likely to be settled in the range of EUR 50-60.000. Based on the above, Mr. Williams believed there was a strong basis to move ahead with loan restructuring.

Restructuring the loans and providing additional financing

Several days later, ABC presented its restructuring proposal to the banks. It proposed that First and Second Banks would extend their current loans for a period of seven years at their current rate of 5 per cent. In addition, these banks would lend ABC additional EUR 25.000 secured by the proceeds of the warranty claim. With respect to Third Bank, ABC offered to enter into a debt for asset swap whereby they would settle their debt by transferring the ownership of the vacant land to the Bank in return for full cancellation of their debt. Mr. Williams duly called a meeting of the creditors to discuss the proposal.

Mr. Williams began the meeting by reminding the banks that ABC's proposal represented a starting point to begin negotiations and should not be dismissed out of hand. He suggested that they focus on finding those areas that they agreed upon and then draft a counter-proposal around those elements. After a lengthy discussion, the banks agreed that the company was viable; it was generating sufficient cash flow to repay the banks over a yet to be determined time frame; the interest rate should be increased to reflect the increased risk inherent in the extended repayment plan; and that the company needed additional funding to support operations until such time as the proceeds of the warranty claim were received. In addition, both Second and Third Banks indicated that to move forward they would need additional collateral from either the company or the guarantor to cover the collateral shortfall revealed by their recently received appraisals.

Areas of disagreement centered around the advance of additional working capital funds and the proposed debt for asset swap. Second Bank was unwilling to advance fresh monies. They pointed out that they were an equipment lender, lacked expertise in evaluating receivables, and the value of their existing collateral was insufficient to fully cover the loan. Third Bank was more vocal stating that in addition to also being unwilling to advance additional money, they would not consider ABC's debt for asset swap offer. They believed the company was viable and could repay the debt over some time period. Thus, it did not meet their policy criteria for a debt to asset swap with debt forgiveness, namely that all other means of repayment had been exhausted and that there was no equity left in the company. They would, however, be willing to extend the maturity of the loan for an unspecified time period to allow time for the company to sell the property in an orderly fashion in return for regular monthly principal and interest payments and the previously mentioned additional collateral.

Based on the guidance provided by the banks, Mr. Williams began to rework ABC's proposal to fit the banks' guidelines for restructured loans including a tenor not to exceed five years, EBITDA of at least 110% of principal and interest, a maximum rate of 6percent, and monthly payments of principal and interest with no moratorium on payments. With a sustainable EBITDA of EUR 40.000, the company would be able to repay the loans at the increased rate of 6 per cent over five years.

Additional terms and conditions included:

- Second and Third Banks would receive additional collateral, from either the company or the guarantor, to cover their shortfalls.
- Third Bank would agree that if the land was sold within 36 months, the interest rate on the deficiency balance, if any, would be reduced to 5 per cent. Principal payments would remain

unchanged. As the repayment amount had been calculated based on the original EUR 50.000 principal balance, this would result in the loan being paid somewhat earlier than originally scheduled.

- Second Bank would treat any deficiency balance resulting from the sale of their collateral in the same manner.
- ABC would agree to apply the balance of funds received from the warranty claim, after payment of any new monies advanced, to each of the banks' loans on a pro rata basis.
- In addition, the banks would receive an annual payment equal to 100 percent of cash balances over EUR 20.000 (which the banks' believed to be the bare minimum required to operate the company).
- The loan would be governed by a Master Loan Restructuring Agreement which would require quarterly financial statements, an annual cash budget detailing receipts and expenses on a monthly basis, and contain normal covenants with respect to maintaining EBITDA, working capital levels, prohibition of additional debt, payment of taxes, etc. All loans would be cross-defaulted, that is a default with one lender would be an event of default at the other two banks.

Negotiations continued over the course of the next few weeks. While Mr. Atlas readily agreed to the five-year repayment terms and the loan covenants, the provision of additional collateral, the sharing of the warranty claim proceeds and the annual cash flow sweep, and the additional loan proved more difficult. These issues were finally resolved as follows:

- First Bank reluctantly agreed to advance the EUR 25.000 additional working capital monies secured by the assignment of the warranty claim proceeds. In recognition of the benefit that the other banks received from the advance, they in turn agreed to indemnify First Bank for their pro rata share of any losses
- Second Bank was granted a pledge covering unencumbered equipment and ABC agreed to sell several pieces which were considered to be excess equipment within the next 15 months.
- Third Bank received a first mortgage on a small piece of property that Mr. Atlas had purchased some years before.
- To incentivize Mr. Atlas to maximize the recovery on the warranty claim, the banks agreed that ABC could retain 50 percent of amount remaining after the payment of the new loan. The other 50 percent would be split pro rata amongst the banks.
- After further refinement of the cash budget, the Banks agreed to increase the base cash level from EUR 20.000 to EUR 25.000.

Evaluating workout options

Once the banks had agreed on the terms of the restructuring, Mr. Williams calculated the NPV of recoveries expected under various workout options open to the banks – restructuring, insolvency, and enforcement. First, he estimated the liquidation value of ABC's assets, as follows:

Table 2: Estimated Liquidation value of ABC's assets

Asset	Book Value 12/31/12 (EUR 000)	percent Recovery	Liquidation Value (EUR 000)
Cash	5	100percent	5
Accounts Receivable (First Bank's collateral)			
0-30 days outstanding	42	80	33
31-60 days outstanding	21	60	13
Over 60 days outstanding	80	10	8

Total accounts receivable	143		54
Inventory			
Finished goods	75	50	38
Work in process	36	0	0
Raw materials	25	80	20
Total inventory	136		58
Equipment			
Vehicles (Second Bank's collateral – appraised value)	42	50	21
Unencumbered equipment	24	50	12
Total equipment	66		33
Land (Third Bank's collateral – appraised value)	50	.5	38
Total Assets	**400**		**188**

He then calculated the cost of a bankruptcy proceeding (EUR 18.192) as follows:

- *Court fees*: an advance fee of EUR 3.434,50 for all filings (debtor and creditor).
- *Publication fees*: EUR 120 to cover for the publication in the official gazette the opening of the bankruptcy case.
- *Administrator*: Total remuneration is based on 3 components: (i) value of the estate, (ii) number of creditors, and (iii) proceeds distributed to creditors. For the purposes of this case, the estate is valued at EUR 400 thousand, there are 10 creditors, and distribution proceeds equal EUR 188 thousand. The remuneration of the administrator would be EUR 14.637,50 calculated as follows: EUR 3.447 for opening report; EUR 1.420,50 for testing claims; and EUR 9.770 for distribution of proceeds. Thus, in a bankruptcy proceeding there would be sufficient assets to pay the costs of the proceeding. (Please see Annex 1 at the end of this case for the calculation of the distribution of liquidation proceeds.)

Finally, Mr. Williams calculated the NPV of the various workout options for each of the banks using a standard 7 percent discount rate[1]. To be conservative, the restructuring option was evaluated on a worst-case basis – that is, warranty claim proceeds were only sufficient to repay working capital advance and the banks received no prepayments from early sale of assets or cash flow sweep. Based on this analysis (see Annex 2 at the end of the case for full details), restructuring was clearly the best alternative for Second and Third banks due to the shortfall in the value of their collateral. In the case of First Bank, the picture was not as clear as they were only marginally better off under the restructuring option. However, the bank was committed to restructuring viable companies whenever possible. They also felt that the risk was minimal as they were well secured and ABC had already received a settlement offer of EUR 25.000.

Lessons learned

Upon reflection, Mr. Williams felt that the ABC case contained several important lessons, including:

- *The focus on the faulty battery cables masked the downtrend in sales as well as several other warning signals.* The EWS had correctly identified potential problems a year earlier as receivable collections began to slow. But the ready acceptance by both the lending officer and borrower that

[1] Standard rate had been agreed upon amongst the banks to ensure a consistent approach for evaluating workout options.

the problems were temporary in nature and the result of the defective cables masked the decline in sales. The account officer also failed to understand that given the borrower's reliance on the construction industry (some 55 percent of its cables were used in heavy construction equipment), the company was certain to be adversely effected by the downturn in the industry.

- *The failure to monitor more closely the borrower's relationship with other banks.* In cases where there are multiple banks involved with a borrower, the bank need to monitor the borrower's relationship with these additional lenders more closely. In ABC's case, Second Bank's tightening the terms of its lending to ABC should have been explored more closely.
- *The importance of looking for alternative solutions.* Second and Third Bank's offer to indemnify First Bank for their share of any losses incurred on the working capital advance represented a creative solution which allowed the restructuring to proceed. Banks should also keep in mind that fresh money may also be created by allowing the company to use a greater share of cash flow, better cash management procedures within the company and/or requiring the owner to inject additional funds into the company. All alternatives should be explored before agreeing to advance new monies.
- *The importance of understanding when certain workout strategies are appropriate.* Third Bank quickly recognized that ABC did not meet the criteria for a debt to asset swap. It had sufficient cash flow to repay the bank over a slightly extended timeframe. This strategy is a last resort option which should only be used when the borrower or project is unviable and there are no alternative payment structures. The valuation methodology for establishing the transfer price and determining any deficiency balance must be based on a transparent, market based approach to ensure that the borrower is receiving a market price for his asset.

Annex 1: Calculation of distributions to creditors in bankruptcy proceeding

Distribution of Liquidation Proceeds in Bankruptcy Proceeding

Total Liquidation Proceeds	**EUR 188.000**
Less: Cost of Proceedings	**18.192**
Available to satisfy creditors' claims	**169.808**
Less: Secured Claims	**121.000**
Available to satisfy unsecured creditors' claims	**48.808**

Calculation of Secured Claims

Bank	Claim	Liquidation Proceeds	Deficiency Balance (Unsecured Claim)
First	EUR 50.000	EUR 50,000	EUR 0
Second	35.000	21.000	14.000
Third	50.000	38.000	12.000
Total	135.000	109.000	26.000

Calculation of Distribution to Unsecured Creditors

Unsecured Creditor	Claim	Claim as percent Total Claim	Distribution	Loss
Second Bank	EUR 14.000	10,5	EUR 5.125	EUR 8.875
Third Bank	12.000	9	4.392	7.608
All Others	107.000	80,5	39.291	67.709
Total	133.000	100,0	48.808	84.192

Annex 2: NPV Analysis of workout options for each bank

EUR 000

Bank	Option	NPV	2013	2014	2015	2016	2017
				Year			
First	**Restructure**						
	Principal		-15.000	35.000	10.000	10.000	10.000
	Interest		4.200	2.850	1.500	900	300
	Total Cash Received		-10.800	37.850	11.500	10.900	10.300
	NPV	**48.013**					
	Enforcement						
	Liquidation proceeds				45.000		
	Cost of Proceeding		(800)	(950)	(750)		
	Total Cash Received		(800)	(950)	44.250		
	NPV	**34.544**					
	Insolvency						
	Liquidation proceeds			50.000			
	Cost of Proceeding			-			
	Total Cash Received			50.000			
	NPV	**46.729**					
Second	**Restructure**						
	Principal		7.000	7.000	7.000	7.000	7.000
	Interest		1.890,	1.470	1.050	630	210
	Total Cash Received		8.890	8.470	8.050	7.630	7.210
	NPV	**33,239**					
	Enforcement						
	Liquidation proceeds				18.900		
	Cost of proceeding		(800)	(950)	(750)		
	Total Cash Received		(800)	(950)	18.150		
	NPV	**13.238**					
	Insolvency						
	Liquidation proceeds			29.875			
	Cost of proceeding						
	Total Cash Received			29.875			
	NPV	**27.921**					
Third	**Restructure**						

Principal		10.000	10.000	10.000	10.000	10.000
Interest		2.700	2.000	1.500	900	300
Total Cash Received		12.700	12.000	11.500	10.900	10.300
NPV	**47.485**					
Enforcement						
Liquidation proceeds				34.200		
Cost of proceeding		(800)	(950)	(750)		
Total Cash Received		(800)	(950)	33.450		
NPV	**25.728**					
Insolvency						
Liquidation proceeds			42.392			
Cost of Proceeding			-			
Total Cash Received			42.392			
NPV	**39.619**					

Case Study #3: GRQ Ltd. –Bankruptcy of unviable company

Background

GRQ Ltd., established in 2006 by John Smith, manufactured and installed custom designed cabinetry for commercial and residential use. Known for its innovative designs and high quality workmanship, the company expanded rapidly and quickly became profitable. In early 2012, having outgrown their existing facility, the company purchased a substantially larger headquarters and manufacturing facility for EUR 1.500.000. The company planned to rent the excess space to help pay for the cost of the building. Bank A financed EUR1.200.000 (80 percent of the cost) on a 10 year note at 5percent, with the remaining EUR 300.000 being paid in cash by GRQ. This note was secured by a mortgage over the facility, as well as by a lien on fixtures and furniture. In addition, Bank A granted the company a EUR 250.000 working capital line with interest at 4 percent/annum, and maturity in in April, 2015. This note was secured by accounts receivable. Mr. Smith also personally guaranteed both loans.

The company was hit badly by the 2012 financial crisis. Sales plummeted 60 percent in 2013 and have remained at that lower level since then. The company has been able to rent only 10 percent of its excess space at substantially reduced rates. The company was placed on the bank's newly established watch list in May 2015 due to its net loss in 2014. Subsequently, the bank, believing that the problems were temporary in nature, tried to work with the company, a major employer in its region. The working capital line was increased from EUR 250.000 to EUR 320.000 and the maturity of the working capital line extended for an additional year. The terms of the investment loan were also revised to allow an additional one year moratorium grace period on principal payments.

GRQ defaulted on its March 31, 2016 interest payment. Based on this default, coupled with the fact that the borrower had been on the watch list for almost one year without substantive improvement, the 2015 fiscal statement was now past due as of April 30, 2016, and the owner, Mr. Smith, has not been responding to calls from his loan officer, the account has been transferred to the workout unit in accordance with the bank's internal procedures.

Initial steps upon transfer to workout unit

The company failed the initial viability assessment based on a debt-to-EBITDA ratio of 9,6 calculated on the basis of 2014 statements in the loan file, although it passed on the collateral coverage parameter with a loan to value ratio of 80 percent. Given the bank's commitment to try to preserve employment whenever possible, it was decided that the bank should take a closer look at the account to determine if there was a possibility of restructuring the exposure.

The account was assigned to Bob White, an experienced workout officer. He immediately conducted a thorough review of the loan file, noting that in addition to the missing fiscal statements GRQ had failed to provide its annual cash flow projections together with an aging of accounts receivable and inventory. He consulted with the legal team and together they determined that the collateral had been perfected properly and no legal documentation was missing. Mr White also ordered an updated property appraisal. As required by the bank's policy, within five days of the account being transferred to the workout unit, Mr. White notified the borrower, as well as Mr. Smith as guarantor, within 5 days of the loan being transferred to the workout unit, that (i) GRQ was in payment default with respect to its March interest payment and requested that the past due amount together with late fees and penalty interest be brought current; (ii) GRQ was also in default of the terms of the loan agreement with respect to the delivery of the year-end statements and ageing of accounts receivable and inventory; and, (iii) the loan had been transferred to the workout unit, introduced himself as the new relationship officer and requested the Mr. Smith contact him at his earliest convenience to discuss repayment options.

Fifteen days passed with no word from Mr. Smith. Mr. White sent a second letter requesting the information and notifying Mr. Smith that failure to respond within 15 days would result in GRQ being classified as a "non-cooperative" borrower and transferred to the legal team for collection. Several days later, Mr. Smith called and apologized for his tardiness in responding, citing his preoccupation with sales efforts. He also claimed to have just "forgotten" to send the statements and committed to do so when he had a spare moment in the next few days. Mr. White responded that he would pick the statements up himself the next time he was in the area visiting another client. Mr. Smith reluctantly agreed.

During his visit Mr. White observed that the company's premises were well maintained and the office furnishings were appropriately modest. During a plant tour, he noted that most of the raw materials were precut to customer specifications and that there were a number of finished cabinets in stock. Mr. Smith explained that they had been returned by customers during the past two years but he was sure that he would be able to use them for upcoming orders. Mr. White also noted that Mr. Smith seemed uncomfortable and evasive when pressed on the company's financial performance and referred most questions to "his accountant". He also seemed to be more focused on "new business opportunities" than on the day to day operations of the company.

Financial and business viability analysis

Once back in the office, Mr. White began his analysis of the company's 2015 statements. He was not surprised to see that the company deteriorated sharply in 2015 but was concerned that the company was now past due on its taxes (See Table 1 for selected financial indicators). The combined effect of a 7percent decline in sales and increased cost of goods sold (due primarily to suppliers raising their prices to offset the slowness in payment) resulted in lower gross profit which was barely sufficient to cover Selling, General and Administrative expenses. EBITDA was insufficient to cover interest and the company reported a net loss for 2015 of EUR 283.000, up from the previous year's loss of EUR 110.000. He also noted the company's declining quick ratio and noted that it was likely overstated due to the generally poor quality of both the accounts receivable (based on the ageing) and inventory. The company's projections showed limited ability to service the debt. They were based on a substantial increase in sales from yet to be identified sources and would require a substantial increase in the working capital line.

Table 1: Selected Financial Indicators of GRQ

INDICATORS	2013	2014	2015
Profitability Indicators			
EBITDA (margin)	239 (5 percent)	207 (9 percent)	-10 (0 percent)
Operating profit (margin)	172	-110	-283
Net profit (margin)	75	-110	-283
Liquidity			
Quick Ratio	1.04	,86	.70
Solvency			
Debt to worth	2,52	2,87	5,12
Debt to EBITDA	6,6	9,6	207,8
Interest coverage	3,2	2,96	,14

Efficiency			
Accounts receivable days	68	97	122
Accounts payable days	65	88	122
Inventory turn days	77	103	100

Having concluded his financial analysis, Mr. White turned to assessing the viability of the business. He began with GRQ's management. He noted Mr. Smith's lack of financial knowledge, his focus on sales which prevented him from recognizing the seriousness of the company's problems, and his limited cooperation with the bank. This led Mr. White to conclusion that Mr. Smith is not capable to design and manage a turnaround of the company.

He then moved on to compare GRQ with similar companies in the bank's loan portfolio. The comparison was not favorable. While all showed the effect of the economic slowdown, most had managed their financial resources more effectively and exhibited a stronger financial position. Mr. White also noted that the industry was undergoing a period of major consolidation as strong companies were expanding largely through purchasing equipment and facilities at highly discounted prices at bankruptcy auctions. GRQ is a relatively small player in the industry with insufficient resources to compete effectively against the larger competition. Furthermore, the bank's own internally produced economic projections for the local real estate market did not support growth in the rental market, making it unlikely that the company can rent its substantial excess space in the near term.

Deciding on workout strategy

Based on the above, Mr. White concluded that the company was not viable either from a financial or business perspective and referred GRQ to the legal team. The legal officer working together with Mr. White proceeded to determine the likely value of the recoveries that would be received at the end of bankruptcy procedure as follows:

- **Accounts receivable**: Age analysis of the receivables as of 12/31/15 revealed that of the EUR 692.000 outstanding, EUR 150.000 were within 30 days, EUR 75.000 were within 60 days, with the balance of EUR 467.000 outstanding over 60 days. It was further estimated that the bankruptcy procedure would recover 80 percent of amounts within 30 days, and 60 percent of the accounts 30-60 days past due, and 10 percent on any remaining amounts. Total receipts from collection of receivables are calculated as follows:

Receivable Category	Amount (EUR)	Percentage Recovery	Liquidation Value
0 – 30 days outstanding	150.000	,80	120.000
30 – 60 days outstanding	75.000	,60	45.000
Over 60 days outstanding	467.000	,10	46.700
Total			**211.700**

- **Building:** A recent appraisal of the building shows a market value of EUR 1.200.000. Based on experience the bank believes that it should be discounted by 10 percent to reflect its value at auction.

- **Furniture, fixtures and equipment** amount to approximately EUR 150.000. Furniture and fixtures account for approximately EUR 25.000 and will sell at auction for 10 percent of their appraised value. The EUR 125.000 of equipment is expected to sell for 50 percent of its value.

In total, in a bankruptcy proceeding the bank expects to recover as follows:

Category	Amount recovered (EUR)
Accounts receivable	211.700
Building	1.080.000
Fixtures	2.500
Equipment	62.500
Total	**1.356.700**

This amount is then discounted by 10 percent to reflect a further decline in collateral values during the extra year that it will take to conclude an enforcement proceeding

The legal officer then calculated the NPVs for enforcement vs bankruptcy proceeding (see Box 1), based on the estimates of relevant legal costs, and assuming, based on prior experience, that enforcement will take one year longer than bankruptcy. Based on the results, the legal officer recommended that the loan be collected through bankruptcy proceedings.

Table 2. NPV calculation for recovery from insolvency and enforcement proceedings

Bankruptcy		**2016**	**2017**	**2018**
NPV (EUR)	**1.076.999**			
Liquidation Proceeds			1.356.700	
Payment Taxes			-50.000	
Cost of Proceeding		-3.554	-69.841	
Total Net Proceeds		-3.554	1.236.859	
Enforcement				
NPV (EUR)	**949.638**			
Sale at auction				1.221.030
Payment of Taxes				-55.000
Cost of Proceeding		-800	-950	-750
Total Net Proceeds		-800	-950	1.165.280

Recoveries net of costs discounted to present at bank's standard discount rate of 7 percent

Lessons learned

Several months later, in response to a question asked by his manager, Mr. White lists the following lessons learned from this case:

- The loan was poorly underwritten at inception. The real estate market was already showing signs of distress and the bank failed to adequately assess the likely effect on GRQ's business as well as its ability to rent the excess space which was considered to be a secondary source of repayment.

- The loan agreement did not require quarterly financial statements together with the ageing of accounts receivable and inventory or a monthly cash budget which would have allowed the bank to monitor performance more closely and take corrective action earlier.

- The EWS system correctly identified the borrower's declining financial performance but the loan officer's inexperience coupled with an overriding desire to accommodate the borrower and avoid a NPL prevented him from adequately responding to the elevated risks.

- The restructuring of the loan represented an improper use of the moratorium tool. This option was designed to be used for short periods only to allow time to assess the borrower's financial condition. When the initial grace period expired, the bank should have conducted a full financial analysis and either restructured the loan based on the projected sustainable cash flows or referred the loan to the workout unit.