Global Transaction Services

Cash Management  Trade Services and Finance  Securities and Fund Services

Optimizing the Supply Chain
For Trade in Latam

May 2006
Rogerio Haddad
Agenda

- Performance Measurements
- Risk Management: The Credit Engine for Trade and Channel Finance
- Integrated Trade and Channel Finance Solutions
- Identifying Opportunities (example)
Performance Measurements
"Measure twice, cut once" is an old and popular saying in the carpentry and building trades.

This same phrase also applies to Modern performance measurement techniques that are now driving factors in corporate behavior.
It’s Not The Finance Agent Perspective that Matters. It’s the Client’s…

Customers are looking for **Solutions**,  
Satisfy the Customer,  
Create a Marketing Edge and  
Build an Enduring Relationship

To successfully structure finance solutions, there is a need to understand the customer’s needs and  
**Performance Measurement Concerns**

**Measurement Concerns are Real Concerns**
Performance Measurement …

Decision making is influenced by the **Performance Measurement** that is selected.

**NEED FOR LONG-TERM VIEW**
- High Probability of Significant Industry Change
  - Technology
  - Regulation
  - Competition
- Long Life of Investments
- Complexity of Business Portfolio

**PERFORMANCE METRICS**
- Growth of Net Income
- Multi-year DCF or EVA
- Net Income; Return on Sales
- ROIC - WACC; EVA

**CAPITAL INTENSITY**
(Need for Balance Sheet Focus)
- Working Capital
- Property, Plant and Equipment

Understand the measurement and you understand the motivation.

Channel Finance solutions strives to understand:

- Management Motivation
- Corporate Measurement
- Market Measurement and Valuation

In order to help their customer’s performance by:

- Turning soft-assets into Cash
- Reducing overall capital requirement
- Providing Balance Sheet enhancing solutions
- Reducing administrative expenses
- Increasing sales
- Outsourcing services that detract from the company’s main activity
- Improving Risk Management
How Companies are Measured

Individual measures are usually suited to specific companies and industries

Over time, however, there has been a gradual shift from emphasis on SIZE to:

**Profits**

And, more recently:

**Value Creation**
Measurement techniques

- **Corporate Measurement considers**
  - Growth
  - Profitability
  - Efficiency
  - Asset Intensity
  - Debt Capacity
  - Cost of Capital, etc.

- **There are numerous techniques and formulas**
  - ROI, ROE, ROA, DCF, CFROI, EVA, etc.
Not everyone has the same goal

### Managerial Role

<table>
<thead>
<tr>
<th></th>
<th>CEO</th>
<th>Corporate Staff</th>
<th>Business Unit Manager</th>
<th>Functional Manager</th>
<th>All Other Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns to Shareholder</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Economic Profit</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Capital Utilization</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Operating Value Levers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Measurement Methods

Three, frequently employed methods of corporate measurement:

- **EVA** – *Earnings Value Added*
- **CFROI** – *Cash Flow Return on Investment*
- **DCF** – *Discounted Cash Flow*
When are they used?

While the three are interrelated, and often substitute for one another...

- **EVA** is most often used to judge *management performance for compensation purposes*.

- **CFROI** is mainly used as a *tool for equity analysis*, and

- **DCF** is primarily used to judge *new projects or investments*.
EVA: *The Economic Profit Equation*…

Many companies are now being judged and judge their individual business units and their managers on the basis of "*Earnings Value Added*" ("EVA").
EVA: *The Economic Profit Equation…*

There are two manners in which companies calculate EVA. In reality they are the same, and yield the same result. We will focus on one:

\[
EVA = \left( \frac{\text{Return on Capital}}{\text{Cost of Capital}} \right) \times \text{Invested Capital}
\]

\( WACC \)
\( \) Weighted Average Cost of Capital

\[
= \left( \frac{\text{Operating Profit Margin} \times \text{Asset Turnover} \times (1 - \text{Cash Tax Rate})}{\text{Cost of Capital}} \right) \times \text{Invested Capital}
\]

*EVA cont.*
Therefore, to increase its value, a company must do one or more of the following:

- Increase the level of profits it earns on existing capital;
- Maintain profits while reducing required capital;
- Increase the return on new capital investment;
- Increase its growth rate, but only to the extent that the return on new capital exceeds WACC; and/or
- Reduce WACC.

The message to corporate management is that they must focus on capital as well as cost.

*EVA cont.*
An October 1998 Citibank study attempted to demonstrate how finance products can be utilized to positively influence EVA value drivers.

The study reported the following:

EVA

Return on Capital

- Operating Margin
- Asset Turnover
- Taxes

Cost of Capital

WACC

EVA cont.
## The October 1998 Citibank study

### Return on Capital

<table>
<thead>
<tr>
<th>Operating Margin</th>
<th>Asset Turnover</th>
<th>Taxes</th>
</tr>
</thead>
</table>
| - Enhance product portfolio | - Reduce assets  
  - Inventory control  
  - Securitization  
  - Defeasance  
  - Project finance  
  - Partnerships  
  - Joint ventures  
  - Divestitures  
  - Regional/global posting  
  - Discounting bills of exchange  
- Increase productivity | - Enhance capital allocation within business portfolio  
- Reduce SG&A expenses | - Reduce working capital | - Utilize expiring NOLs  
  - Accelerating income  
  - Restructuring  
  - Defeasance |
| - Outsource services  
  - Payables  
  - Transaction services  
  - T&E credit cards | - Reduce assets  
  - Inventory control  
  - Securitization  
  - Defeasance  
  - Project finance  
  - Partnerships  
  - Joint ventures  
  - Divestitures  
  - Regional/global posting  
  - Discounting bills of exchange | - Reduce foreign taxes  
  - Increase foreign debt  
  - Postpone income recognition  
  - Relocate earnings stream |
| - Reduce leasing/rental expenses  
  - Master leasing  
  - Review existing contracts | - Regional/global FX netting and pooling | - Tax-effective financing |
| - Regional/global FX netting and pooling | - Enhance capital allocation within business portfolio  
- Reduce working capital | - Offset capital gains with capital gains generators |

*EVA cont.*
The October 1998 Citibank study

Cost of Capital

<table>
<thead>
<tr>
<th>WACC – Weighted Average Cost of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Optimize capital structure</td>
</tr>
<tr>
<td>▪ Equity derivatives</td>
</tr>
<tr>
<td>▪ Asset-backed bonds</td>
</tr>
<tr>
<td>▪ Efficient use of global capital markets</td>
</tr>
<tr>
<td>▪ Broad investor base—ADRs</td>
</tr>
<tr>
<td>▪ Investor-driven issues</td>
</tr>
<tr>
<td>▪ Derivatives</td>
</tr>
<tr>
<td>▪ Minimize non-earning assets</td>
</tr>
<tr>
<td>▪ Reduce Beta (volatility)</td>
</tr>
<tr>
<td>▪ Return profits to shareholders advantageously (e.g., share buybacks)</td>
</tr>
</tbody>
</table>

Take Note:
The issues and products studied here almost always have the same effects on DCF and CFROI.
Discounted Cash Flow (DCF) is the classic capital budgeting & project evaluation tool.

DCF compares cash investment in a project with cash to be generated over the life of the project.

The objective is to find projects in which the Internal Rate of Return of the investment exceeds a hurdle rate, often Cost of Capital. The amount of value added by the project is its Net Present Value.
CFROI...Cash Flow Return on Investment

**CFROI** is the Internal Rate of Return that equates the Present Value of gross cash investment with gross cash flow over the average life of the firm’s existing assets.

CFROI is often calculated by equity analysts to identify mispriced stocks. It involves significant prediction.

What comes from existing investments?

\[
\text{PRICE} = \text{Free Cash Flow on Existing Investment} \div (1 + \text{Cost of Capital}) + \text{Free Cash Flow on Future Investment} \div (1 + \text{Cost of Capital})
\]

\[\text{CFROI} - 1\]
Risk Management: The Credit Engine for Channel Finance
It’s not just credit risk …

The Risk Spectrum contains additional risks; those listed are just a sampling.
## Risks in the Channel…for supply chain finance programs (Finance agent perspective)

<table>
<thead>
<tr>
<th>Risk</th>
<th>Supplier</th>
<th>Sponsor</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial performance</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Credit</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Compliance</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Documentation (perfection)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Documentation (custody)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Portfolio</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Information reliability</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Bad management and misconduct</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Adequacy of loss coverage</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Program continuity</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Collecting agency</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Operational</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fraud</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Currency risk</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Risk Management

The Credit Engine for Trade & Channel Finance: Taking & Managing Risk

Improve Risk through Credit Programs

- Balance sheet
- Commercial
- Currency
- Sovereign
- F&G

- Assessing portfolio quality
- Portfolio monitoring
- Support from our sponsor

- Full, partial & limited recourse programs
## Structuring the Finance Solution

<table>
<thead>
<tr>
<th>Risk Management</th>
<th>Funding</th>
<th>Balance Sheet Optimization</th>
<th>Legal</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Risk</td>
<td>Liquidity</td>
<td>Improve Financial Ratios</td>
<td>Legal enforceability</td>
<td>Collections and servicing</td>
</tr>
<tr>
<td>X – Border Risk</td>
<td>Currency</td>
<td>Reduce need for other sources of funding</td>
<td>Types of instruments</td>
<td>Information flow / Data tracking</td>
</tr>
<tr>
<td>Fx Risk</td>
<td>Extended credit terms</td>
<td>Match funding to commercial cycle end-to-end</td>
<td>Master Agreements</td>
<td>Settlement Services</td>
</tr>
<tr>
<td>Operational Risk</td>
<td>More efficient funding structure</td>
<td>Achieve Performance Measurement goals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Integrated Trade and Channel Finance Solutions
What is It?

Trade Finance

- **Trade Loans:** Provide liquidity to International Flows of goods and services:
  - Import Finance
  - Export Finance
  - Bill Discount
  - It’s a Bilateral “Lending relationship”

- **Structured Trade Finance:** Commodity Finance and ECA/MLA Finance, Risk Participation

- **Channel Finance** ...
What is It?

Channel Finance is about:

Structuring commercial and financially *integrated solutions* &

Managing *risk* and serving relationships that are defined by the commercial and financial *flows* across the *Supplier* and Distribution *local & international* chains.
There are four key characteristics

- **Sponsor Based**: Mostly the business starts with a Corporate client as “Anchor Customer”
- **Soft Asset Based**: Underlying assets financed are receivables/payables/inventories (flow of goods & services)
- **Ongoing**: Participate actively on the supply chain flow
- **Short Term**: Throughout the Chain (linked to the Operating Cycle)
The Channel finance is about creating…

“Value”

Value is created by bundling financing and services into a unique tailor made solution

And by managing risk in a smart way
It’s all about creating value…

Supplier Financing

- New Source of Financing
- Expanded working capital capacity
- Optimize liquidity and cash flow management
- Can offer better financing terms
- Access to more competitive interest rates
- New bank relationship

Value for Supplier  Value for Sponsor  Value for Distributor
It’s all about creating value…

- Better sales financing terms and conditions
- Incremental credit line
- Access to more competitive interest rates
- Expanded working capital capacity
- New bank relationship
It’s all about creating value…

### Value for Supplier
- **Risk Mgmt:** Commercial, currency, political, sovereign and other risks
- **Capital Mgmt:** Reduce WC needs and Capital charges, improving corporate performance (EVA, ROIC, etc.)
- **Profitability:** Increased sales and margins by offering more competitive financing terms and conditions
- **Funding:** Improved liquidity and cash flow management
  - Past due mgmt. (carrying cost linked with managing receivables and cash shortfalls)
- **Services:** Outsourcing of collection management
- **Process:** Improvement of overall collection and payment process
- **Expenses:** Reduction of administrative expense and workload

### Value for Sponsor
- **Risk Mgmt:**
- **Capital Mgmt:**
- **Profitability:**
- **Funding:**
- **Services:**
- **Process:**
- **Expenses:**
Identifying Opportunities
Benefits

- **Benefits to Client/Seller**
  - Liquidity matched to the day-by-day; improved cash conversion cycle
  - Flexible funding structure
  - Risk Mitigation: partial recourse portfolio guarantee
  - Reduction of DSO’s; managerial goals achievement
  - Collections services

- **Indirect Benefits to /Buyer**
  - Seller liquidity ensures uninterrupted supply flow
  - Trade record provides history within Citibank; opportunity for future relationship

---

Questions to Think About

- What are your performance measurement goals? (mainly those related to receivables management – DSO, EVA, etc)
- What is your annual volume of domestic sales for merchandise or materials?
- How many customers do you have?
- Where are they located?
- What are your terms of sales?
- Which are your historical financial figures regarding A/R portfolio?
- How timely are your customers with their payments?
- What are your credit collections policies?
- How large is your credit collections staff?
- Is there seasonality in your sales?

---

**Target Industries**
- Chemical, Oil, Pulp & Paper, Packaging, Consumer Goods, Metals, etc (soft assets, short-term receivables)

**Common Customer Characteristics**
- Major Manufacturer
- In need of liquidity or wants to improve Financial Ratios
- Large Number of Buyers
- Wants to mitigate the risk of buyers

---

**Pricing**
- Banks / Sponsor: pre-established interest over amount financed
- Sponsor / Buyers: Bank’s interest rate + financial revenue (applicable or not)

---

**Decision Makers**
- Commercial Unit heads
- Chief Financial Officer
- Financial Director
- Treasurer
- Credit & Collection Manager

---

**I – Receivables Cycle: Partial Recourse Sponsored Receivables Finance**

Ongoing Relationships

1. Services and Goods

2a. Electronic billing file

2b. Invoices

3. Advance Funds

4. Payment @ Maturity

---

**Chemical Company - Seller - (Sponsor)**

**PARTNER BANK**

**Citigroup**
**Benefits**
- Benefits to Supplier
  - Liquidity matched to the seasonality of the business and the currency of the underlying receivable
  - Risk Mitigation: Ability to sell more or on open account
  - Improved cash conversion cycle; Reduction of DSO's
  - Collections services
- Indirect Benefits to Buyer
  - Seamless process allows to buy more on open account
  - Supplier liquidity ensures uninterrupted supply flow
  - Trade record provides history within Citibank; opportunity for future relationship

**II – Partial Recourse ➔ Limited Recourse Sponsored Receivables Finance**

**Ongoing Relationships**
1. Services and Invoices
2a. Account Receivables
2b. Notification
3. Advance Funds
4. Payment @ Maturity

**IT Provider – Seller-Supplier**

**Target Industries:**
- C & H
- TMC
- Industrials
- PECM

**Common Buyer Characteristics**
- Major Manufacturer or Distributor
- In need of liquidity or wants to improve Financial Ratios
- Large Number of Buyers
- Wants to mitigate the risk of buyers

**Questions to Think About**
- What is your annual volume of exports and domestic sales for merchandise or materials?
- How many customers do you have?
- Where are they located?
- What are your terms of sales?
- How timely are your customers with their payments?
- What are your credit collections policies?
- How large is your credit collections staff?
- Is there seasonality in your sales?
- How many suppliers do you have and where are they located?
- What terms do you receive from your suppliers?
- What are your performance measurement goals? (mainly those related to receivables management – DSO, EVA, etc)

**Pricing**
- Supplier: Interest over amount financed
- Fees for risk mitigation, collections, other services

**Decision Makers**
- Commercial Director
- Assistant Treasurer
- Chief Financial Officer

**Target Company Profile**
- **Decision Makers**
  - Commercial Director
  - Assistant Treasurer
  - Chief Financial Officer

**Questions to Think About**
- What is your annual volume of exports and domestic sales for merchandise or materials?
- How many customers do you have?
- Where are they located?
- What are your terms of sales?
- How timely are your customers with their payments?
- What are your credit collections policies?
- How large is your credit collections staff?
- Is there seasonality in your sales?
- How many suppliers do you have and where are they located?
- What terms do you receive from your suppliers?
- What are your performance measurement goals? (mainly those related to receivables management – DSO, EVA, etc)
Benefits

- **Benefits to Buyer**
  - Supplier liquidity ensures uninterrupted supply flow
  - Consolidation of payment process
  - Ability to negotiate improved terms
- **Benefits to Supplier**
  - Liquidity matched to the seasonality of the business and the currency of the underlying receivable
  - Risk Mitigation: Ability to sell more
  - Improved cash conversion cycle; Reduction of DSO's
  - Collection services

III - Payables Cycle ➔ Supplier Finance

Ongoing Relationships

1. Purchase Order
2. Goods
3. Invoice
4. Accepted Invoice
5. Payment
6. Payment @ Maturity

**Target Company Profile**

- **Target Industries:** ➔ C & H ➔ TMC ➔ Industrials ➔ PECM
- **Common Buyer Characteristics**
  - Major JENA Manufacturer & Retailer
  - Large Number of Suppliers
    - Improved financing rates
    - Supplying critical goods for the Buyer

**Questions to Think About**

- What is your annual volume of imports and domestic purchases for merchandise or materials?
- In what countries are your suppliers or vendors primarily located?
- What are the terms of your payments? Are they at sight or term payments (30, 60, 90, or 180 days)?
- What type of payment option are you currently using to pay your suppliers: 1) Letters of Credit, 2) Documentary Collections, and 3) Open Accounts?
- Do your suppliers have a need for alternative financing sources and what would be the main drivers for that?
- What is the typical credit rating of your domestic suppliers and / or borrowing rates for your international suppliers?
- Do you currently work with a bank to provide financing to your vendors?
- How large is your payables staff? Is there seasonality in your purchases?
- Do you have any selection criteria for your suppliers (years in business, etc.)?

**Pricing**

- **Buyer:** Fees for payables settlement services
- **Supplier:** Interest over amount financed; Fees for risk mitigation, collections, other services

**Decision Makers**

- Purchasing Manager
- Assistant Treasurer
- Chief Financial Officer
Confidentiality and Disclaimer

The information, concepts and analysis contained herein are provided to you on a confidential basis and are considered proprietary to Citibank, N.A. and its subsidiaries and affiliates (“Citigroup”). You agree to protect our ideas, presentations, methodologies, analytical techniques and recommendations. This material should be used for your internal evaluation purposes only. No part of this material should be disclosed to any third parties except as authorized by Citigroup in advance of such disclosure.

The information herein reflects prevailing market conditions and our judgment as of this date, both of which are subject to change. In preparing this presentation we have relied upon and assumed, without independent verification, the accuracy and completeness of publicly available information.

Although the information contained herein is believed to be reliable, we make no representation as to the accuracy or completeness of any information contained herein or otherwise provided by us. The ultimate decision to proceed with any transaction rests solely with you. We are not acting as your advisor or agent. Therefore, prior to entering into any proposed transaction you should determine, without reliance upon us or our affiliates, the economic risks and merits, as well as the legal, tax and accounting characterizations and consequences of the transaction, and independently determine that you are able to assume these risks. In this regard, by acceptance of these materials, you acknowledge that you have been advised that (a) we are not in the business of providing legal, tax or accounting advice, (b) you understand that there may be legal, tax or accounting risks associated with the transaction, (c) you should receive legal, tax and accounting advice from advisors with appropriate expertise to assess relevant risks, and (d) you should apprise senior management in your organization as to the legal, tax and accounting advice (and, if applicable, risks) associated with this transaction and our disclaimers as to these matters.