

Introduction to International Repo & Securities Lending 全球债券回购与借贷

ASIFMA, CDC, UBS, RBS

SECTION 3 第三节

Settlements, Accounting, Legal, Collateral Mgmt 证券借贷的结算, 会计, 法律及抵押品的管理

International Settlements 国际结算方式

◆ Payment Systems 交付系统

Real time gross settlement (RTGS) 实时结算

- system provide online settlement of payments between financial institutions
为金融机构的交易双方提供实时全额结算
- payment instructions between banks are processed and settled individually and continuously throughout the day
两个银行间结算指令是全天不间断的结算
- benefit: reduce credit risk for the receiving participant
好处:降低收款方的信用风险

◆ Securities Settlement Systems 证券结算系统

- real time **book-entry** 实时记账方式
- offsetting debits and credits are exchanged between the buyer and the seller, using a clearing house or some other trusted financial intermediary
买卖双方通过结算所或其他金融中介,进行结算。

International Settlements 国际结算方式

◆ Settlement Mode 结算方式

Delivery versus Payment (DVP) 券款对付:

payment and transfer of the security occur **simultaneously** where
证券与资金同时过户

- 1) little or no credit risk exists in the settlement process, and
结算过程没有信用风险
- 2) the settlement period is the normal spot settlement period for the
product and market
即期结算，没有拖延时间
- 3) the transaction does not create credit risk after settlement
结算后，不会产生信用风险

Global Clearing Agents 全球清算代理

- ◆ US 美国
 - FEDWire 联储局结算系统: US Treasuries 国债
 - DTC 储存信托公司系统: US Corporate bonds 美国公司债
- ◆ Europe 欧洲
 - Euroclear 欧洲结算公司系统: Eurobonds
 - Clearstream: Eurobonds
- ◆ Asia 亚洲
 - Hong Kong 香港: CMU
 - Singapore 新加坡: MEPS
- ◆ Global Custodians 全球的托管银行
 - State Street 美国道富银行
 - Bank of New York 纽约银行
 - JPMorgan Chase 大通银行
 - Citibank 花旗银行

Corporate Actions 公司行为

◆ Coupons 票息

- for classic repo where the security pays a coupon during the term of a repo, the Borrower will receive that coupon but will be obliged to pay an equivalent amount and pay to the Lender (a manufactured payment)
经典式回购：回购期间若有票息，借入证券方一定要将相同数目付给借出证券方（合成付款）
- for Buy/Sell Back, the coupon will generally be passed back to the seller of the security by adjusting the cash paid at the termination of the Sell/Buy Back.
买断式回购：则在回购满期时调整证券期价/价钱。借入证券方在到期日才“收回票息”。

◆ Others 其他

- Early Call and Redemptions 未到期买回，赎回（券）
- Splits / Reverse Splits 分股或反向分股
- Paydowns 部份还款，分期付款

NOTE: Ensure your operations teams are aware of notification process and procedures (both as Borrower and Lender)

注意：无论是证券借入或借出方，应确定后台操作人员了解知道通知过程和处理手续。

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿

◆ What is a fail? 交割失败的定义?

when a trade fail to settle on the date agreed upon by a buyer and seller
交易虽经买卖双方同意， 但未能完成交割

◆ Why do fails occur? 交割失败的理由？

- miscommunication between buyer and seller 买卖双方联系错误
- operational problems 后台操作问题
- a seller may be unable to deliver securities because of a failure to receive the same securities in settlement of an unrelated purchase. This can lead to a “daisy chain” of cascading fails
卖方未能收到他方应交的证券引致无法提交证券给买方。
这种现象， 容易引起“连锁”性的交割失败。
- a market participant may sell a security it does not own, that is, sell the security “short” (卖空) and unable to borrow that security
市场参与者卖空某券， 但是在市面上借不到该券

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿

◆ Consequences of a fail 交割失败的后果

- Settlement fails are generally not viewed as events of contractual default, the convention is to allow a failing seller to make delivery the next business day at an unchanged invoice price
交割失败并不等于违约。通常第二天以相同价钱再度结算
- the seller loses (and the buyer gains) the time value of the transaction proceeds over the fail interval
卖方融资失败，但须付利息。
买证券方赚得额外利息。

◆ How can fails be avoided? 如何避免交割失败？

- A fail stemming from an inability to deliver securities because of a failure to receive securities can usually be averted by borrowing the securities from a third party and delivering the borrowed securities
若他方未能提交证券，而且时间容许应即刻与其他市场参与者商借同券。
- As the cost of borrowing securities rises, the incentive to borrow securities to avoid failing declines
若借券代价偏高时，交割失败为权宜之策。

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿

◆ Can the seller claim on the buyer? 卖方可否要求买方赔偿？

- if a trade failed due to eg operational problems on the buyer, the seller can put up a claim against the buy for use of funds
如果交割失败是买方的错误，卖方可要求赔偿利息

◆ What happens if the fail persists? What is the risk? 如果交割失败持续一段时见，将会出生什么样的风险？

- increase in counterparty credit risk
增加了交易对手的信贷风险
- Increased labor costs and worsened customer relations
增加了成本费用，影响顾客关系。
- market liquidity can be adversely affected if dealers reduce their participation in a market to mitigate the costs associated with fails
若作市商减低买卖数量，以降低交割失败费用时，会影响到市场流动性。

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿

◆ What can the buyer do? Buy In 买方是否束手无策?

- the buyer of securities can 'buy in' the securities from a third party and passed on the cost of the transaction to the defaulting seller
买方可以“买入”该券，再向卖方索求损失。

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿：回购

◆ Start of Repo 回购开始

If Lender cannot deliver bond to Borrower, then Lender wont be able to use the cash, but still has obligated to pay the repo rate.

借出证券方未能提交证券给借入证券方: 借出证券方虽未能连用资金, 但仍须付出金额的回购利率。

If Lender does deliver bond to Borrower, but the Borrower does not accept:
借出证券方提交证券给借入证券方, 但借入证券方拒收:

If Lender's error, Lender must pay the repo rate on the cash amount
若借出证券方的错误, 须付金额回购利率

If Borrower's error, Borrower must pay appropriate FEDfunds rate
若是借入证券方的错误, 须付对方相当于联邦资金利率的利息

Settlements Fails Responsibility and Compensation Claims 交割失败的责任及赔偿：回购

◆ End of Repo 回购到期

Borrower is unable to return the security, Lender continues to retain the cash and does not have to pay any interest.

借入证券方无法交还证券，借出证券方得继续保留资金. 无须付任何利息。

Borrower returns the security, but Lender refuse to accept.

借入证券方交还证券但是借出证券方拒收

If Lender's error, Lender must pay appropriate FEDfunds rate

若是借出证券方的错误，借出证券方须付相当联邦资金利率的利息

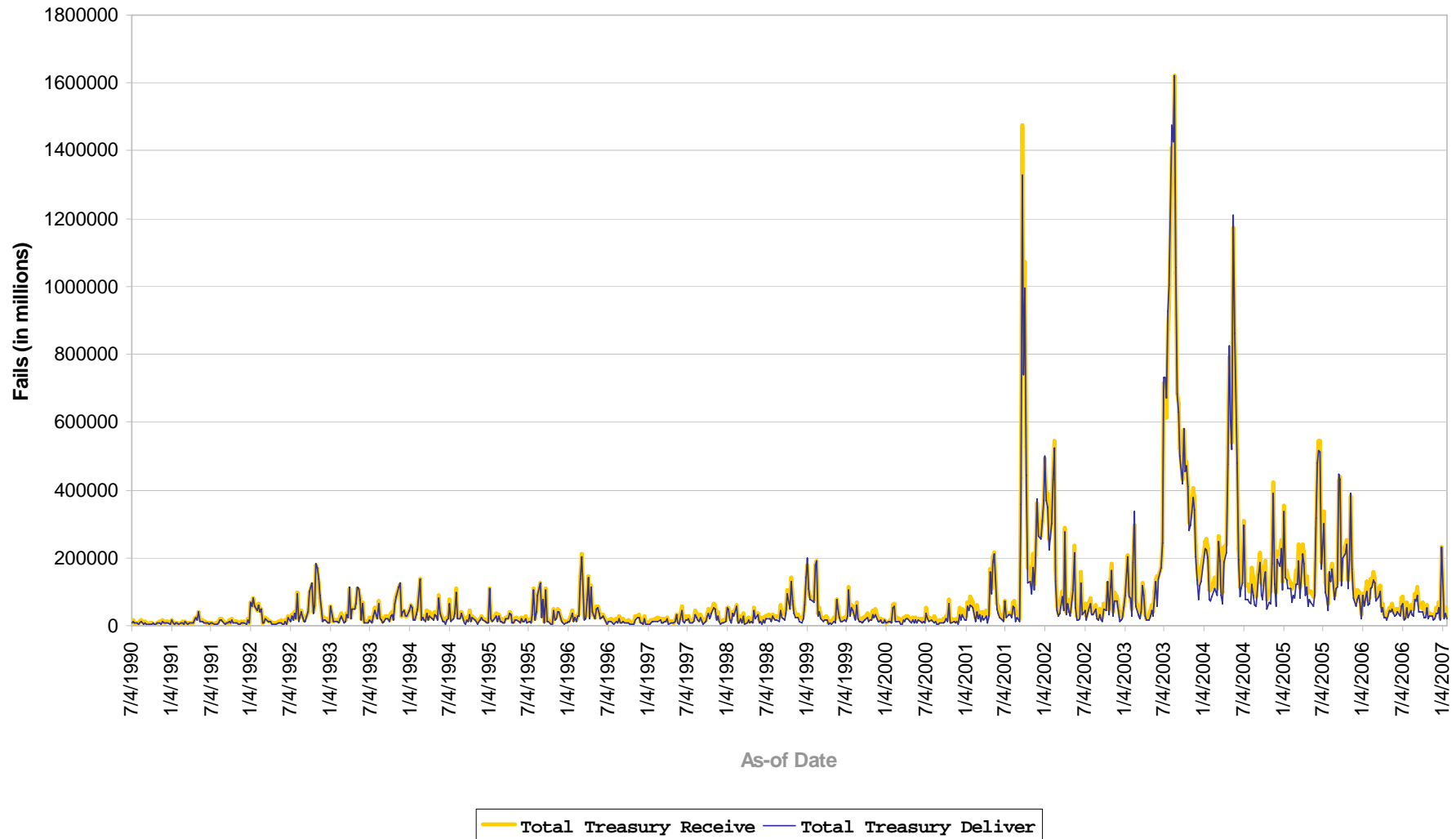
If Borrower's error, Lender continues to keep the cash and pays no interest

若是借入证券方的错误，借出证券方继续保留资金，无须交利息。

Settlement Fails in US Treasury Securities

美国国债交割失败统计数字

Treasury Fails
7/4/90 - Present



Accounting 会计

- ◆ Repos and buysellbacks are treated as financing transactions (loans) for accounting purposes rather than “disposal” and “reacquisition”
从会计观点来看，回购是融资交易而不是“卖断”“再买回”
- ◆ International Accounting Standards - IAS 39.37a (“.....financial instruments used as collateral in a repo should be accounted for separately from other financial instruments.”)
国际会计标准 IAS 39.27a: 用为回购抵押品的财务工具，应与其他的财务工具在账部上分别入账。
- ◆ Example of accounting entry (Seller)

1st Leg Accounting

Dr Cash
Cr Repo Account
Dr Repo px adjustment a/c
Cr Repo interest adjustment a/c

2nd Leg Accounting

Dr Repo Account
Cr Repo px adjustment a/c
Dr Repo interest adjustment a/c
Cr Cash

Legal and Documentation 法律与协议书

◆ Two parties must sign a Master Agreement 双方必须签主协议书

- signed bilaterally 双方签约
- bilateral in order to address asymmetric counterparty credit risks 以应对不均匀的信用风险
- such specific changes are specified in the Annex
若无法避免条款改变, 则用补充条款说明

◆ Master Repo Agreements 回购主协议书的例子

MRA1996	Master Repurchase Agreement (U.S. 美国)	12pp
GMRA2000	Global Master Repurchase Agreement (Europe)	28pp
<i>JSDA Master Agreement for Bond Lending Transactions</i>		10pp
<i>others....</i>		

◆ Master Securities Lending Agreements 证券借贷主协议书

OSLA1995 & GMSLA2000

Industry Groups 行业协会

There are several international industry groups which combine collective practitioner interests in liquidity of fixed-income and equity markets:

国际性的行业协会包含了债券，股票市场参与者

SIFMA

www.sifma.org

U.S. 美国

ICMA (International Capital Market Association)

www.icma-group.co.uk

Europe-based 欧洲

PASLA (Pan-Asia Securities Lending Association)

www.paslaonline.com

Asia-based (Equities) 亚洲（股票为主）

ISLA (International Securities Lending Association)

www.isla.co.uk

Europe-based 欧洲

Why Documentation? 为何需要协议书？

Some Key Concepts in Documentation 协议书内的主要概念

Concept 概念

Title Transfer
拥有权的转移

Recharacterization Risk
交易形式的认同

Enforceability
执行的可能性

Events of Default
无法还款，破产，事件等

Close-out and Netting
结清

Consequence 结果

Rehypothecation, can reuse / re-lend securities
可以再用（借出/ 卖出）

Risk that courts may consider REPO transaction as a cash loan against pledged assets
法庭不承认交易是回购交易，而认为是有担保的借贷

Recourse when agreement is breached
违约后可否追索

Determines what constitutes default
定义？

How to close exposures, accelerate
期满前终止，结清以减低风险

Why Documentation? 为何需要协议书？

Some Key Concepts in Documentation 协议书内的主要概念

Concept 概念

MTM and margining
盯市计算与保证金调整

Substitution Rights
掉换权力

Consequence 结果

Right to mtm collateral and make margin calls
双方皆有计算和调节权力

Seller can substitute
借出证券方能掉换 (有掉换权)

Industry organizations support these standard master agreements.

Legal opinions are obtained for many countries.

行业协会认同标准式协议书，已取得多个国家的法律认同书。

What Does Documentation Mean Practically? 协议书如何简化回购交易？

- What does this do for traders and risk managers?
对交易员，风险管理人员有何帮助？

Standardized language regarding transactions 标准条款减少争议

Familiarity with close-out procedure 简化终止结清手续

Can legally liquidate the asset and obtain cash back
可以合法性的清理资产，取回欠款

Rights + Available Actions → Speed and Close-out Price Volatility
权力 + 执行行动 → 迅速结清 + 降低价格波动风险

- Reinforces the concept of classic repo 再次强调经典回购的概念/好处
 - * Repo as a **credit-risk mitigated secured** transaction *
 - * 回购是一种低风险，有担保品的借贷 *

Collateral Management 抵押品管理部的责任

◆ Valuation / Pricing 估价

- simple and straightforward for liquid securities 流动性高的证券可用“公认”价格
- “generally accepted” market px source (e.g. Bloomberg BGN) “一般接受” 例如：彭博

◆ Exposure Calculation and Monitoring 风险计算和监测

- positions in securities 证券的头寸

◆ Margin Calls 保证金调整

- when exposures exceed MTA (margin threshold amount) 若风险等额大过“最低交付额”时

◆ Margin Management 保证金管理

- margin methods 调整方式: posting/receiving cash 现金
posting/receiving collateral 同等证券
reprice the trade 重新估价

Collateral Managers 抵押品管理经理/管理人员

- ◆ Who they liaise with? 他们跟谁联系？
 - credit officers 信用部门人员
 - legal/documentation 法律部门人员
 - settlements 结算部门人员
- ◆ Operational process 操作手续
 - what time calls are made? 什么时候发出通知？
 - what kind of collateral acceptable? 可否接受的抵押品
 - when margin needs to be delivered by? 保证金转移中止时间
- ◆ What if margin call is not honored? 保证金未能及时转移 / 对手方通知后不回答？
 - eventually can exercise legal rights, but aim not to.
若无可避免，只得诉诸法律途径！

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