

Chapter 17

Central Securities Depositories and Securities Clearing and Settlement: Business Practice and Public Policy Concerns

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ABSTRACT

This chapter describes the emergence of national and international central securities depositories (CSDs) and the systems of tiered account-based security ownership they support. It examines clearing and settlement risks, including principal risk now largely removed by DVP, and liquidity risk reduced but far from fully removed by multilateral netting. Liquidity demand and the complexity of some underlying transactions results in a surprisingly high volume of postponed settlements (trade fails). Systems of clearing and settlement were resilient during the crisis of 2008, but the remarkable complexity of these networks suggests two policy concerns that need further examination. Problems in clearing and settlement could still magnify or transmit systemic financial risk in a future crisis, if firms do not again obtain public sector support; and the sheer complexity of clearing and settlement arrangements may both create operational risks and heighten barriers to entry, hence reducing competition and raising costs to investors.

1. INTRODUCTION

The execution of every financial market transaction is followed by a series of further processes, ensuring the resulting obligations are carried out as agreed and helping counterparties manage the risks of contractual failure. These processes are referred to collectively as ‘clearing and settlement.’

This chapter explains what clearing and settlement is and the institutional arrangements that support it including the role of central securities depositories and custodian banks. It also discusses the challenges of

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promoting competition and efficiency and in clearing and settlement (and related services) and avoiding the transmission and amplification of systemic financial risk through clearing and settlement systems.

Before clearing and settlement can even begin there must be agreement on what has taken place in the trade. This requires matching of the two sides of the trade and confirmation of trade details such as price and quantity. In past times, before automated computer trading was commonplace, the processes of matching and confirmation required considerable manual reconciliation. Today, as trade execution is itself becoming increasingly automated, so is the subsequent matching and confirmation of trade details.

After matching and confirmation all financial trades must then be cleared and finally settled. Clearing refers to everything prior to settlement, establishing who owes what to whom and when. But the same word is often used as shorthand for ‘central counterparty clearing’, when the obligations to make payments or deliver securities arising from a financial trade are transferred to a central counterparty (or CCP); which thus becomes the buyer to every seller and the seller to every buyer. Not every financial transaction is ‘cleared’ through a CCP, but every financial transaction must be ‘cleared’ before it is settled.

¹ After clearing comes settlement i.e. the agreed exchange of money and ownership.

It is not necessary to have a degree in automotive engineering in order to drive a car or to be a qualified plumber in order to run a bath. So why should these post-trade processes matter to anyone who is not a technical specialist? They are in fact a central concern to many others: to traders and investment managers, because of the substantial associated costs and risks associated with processing of financial trades; to final investors and also competition authorities, because clearing and settlement arrangements are a potential barrier to competition and hence source of unnecessary trading costs; and to central bankers and ‘macroprudential’ regulators because problems in clearing and settlement can potentially lead to system wide disruption of financial markets.

This chapter not only describes the process of clearing and settlement, it also draws attention to particular aspects of clearing and settlement where policy makers may need to pay particularly close attention. Clearing and settlement operations have evolved over time to become remarkably complex. This complexity creates business challenges, especially for management of liquidity, which could potentially have systemic consequences for the wider financial system. This complexity may also increase the barriers to entry that can discourage competition in trade settlement and securities services.

The chapter is organised as follows. Section 2 describes how ownership (or title) is recorded and transferred in today’s financial markets, focussing on the hierarchical or tiered accounts in which securities are held. These are contrasted with earlier paper based systems of recording ownership that were widely used before the days of computers.

Section 3 then outlines the main issues of risk and cost involved in securities clearing and settlement. It examines four closely related issues: (a) ‘principal risk’ i.e. the risk that the purchased security is not delivered or the money promised is not paid and how this is overcome through ‘Delivery v. Payment’ or DVP; (b) the remaining replacement and operational risks that are further controlled through central counterparty clearing; (c) the close link between securities settlement, custodian accounts and the provision of liquidity for securities market transactions; and (d) the puzzle of surprisingly high levels of reported trade fails (i.e. postponements of final settlement).

Section 4 discusses two of the major challenges for industry and policy makers that arise in the context of securities clearing and settlement. The first is the maintenance of systemic financial stability and the possibility that a financial crisis might be amplified by problems emanating from securities clearing and settlement. The second are the appropriate steps to promote competition and reduce costs to final investors both in asset servicing and in financial market transactions. Section 5 summarises and concludes.

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