

**Gemloc**

ADVISORY SERVICES

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# Primary Dealer Systems

**DRAFT Background Note**

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A WORLD BANK INITIATIVE



THE WORLD BANK

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## PRIMARY DEALER SYSTEMS BACKGROUND NOTE <sup>1</sup>

This note on primary dealer systems is part of a series of background notes produced under Gemloc Advisory Services Program as a by-product of its strategy to support the development of liquid local currency bond markets. Selected topics have been a key focus in the areas of work of the Advisory Services because of their catalytic impact on debt market development. They include primary market organization through primary dealers and liability management; repo markets; price dissemination and clearing and settlement arrangements<sup>2</sup>.

Primary dealer system can make substantial contributions to the development of the market when its establishment is appropriate for prevailing market conditions. While by no means a precondition for a well functioning government securities market, primary dealers know the market best and are the counterpart of the investors who are the debt management office's ultimate target. The purpose of this background note is to provide some guidance on how to design a primary dealer system so as to best meet the development needs of the market as well as the legitimate expectations of the parties involved.

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<sup>1</sup> This background note has been prepared to support World Bank technical assistance programs for the development of local capital markets. **It is a work in progress and as such should not be quoted.** Comments to [asilva3@worldbank.org](mailto:asilva3@worldbank.org) or [baudouin.richard@live.be](mailto:baudouin.richard@live.be) are welcome. This note will serve as a basis for a forthcoming handbook on the topic.

<sup>2</sup> Three notes have been produced so far on Primary Dealers, Liability Management and Repo Markets. Other notes will follow on Price Dissemination and Clearing and Settlement.

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# Primary Dealer Systems

## 1. INTRODUCTION

### 1.1. Purpose of the Handbook

**The purpose of this Handbook is to provide some guidance on how a primary dealer (PD) system can be designed in order to best meet the development needs of the market as well as the legitimate expectations of the parties involved.**

It is hard to over-estimate the importance of PDs' contribution when the appointment of PDs is appropriate for the conditions of the market. PD systems are by no means a precondition for a well functioning government securities market. Generally, however, PDs know the market best. They are the counterpart of the investors who are the debt management office's (DMO's) ultimate target.

**Yet, PD systems can be a recurrent source of frustrations and complaints.** These affect both the DMO and the PDs themselves. The former say: "PDs are not committed". The latter respond: "DMOs are too demanding". As an illustration, some DMOs legitimately complain that their PDs cannot be depended upon to be consistent and/or fair bidders at auctions of government securities and/or that PDs do not live up to their commitment to enhance the liquidity of the secondary market by continuously quoting firm bid and offer prices. PDs respond that bidding at auctions and quoting firm prices on the secondary market are an expensive and risky business for which they are not adequately compensated. It can happen that both parties are making a legitimate point.

**Some issues encountered by DMOs in the implementation of a PD system can be resolved by taking relatively straightforward steps.** For example, in the aforementioned cases, PDs can be motivated to submit successful bids at auctions by offering them a more generous allocation of non-competitive subscriptions (NCS) after the auction. This can technically be done in a manner that is costless to the DMO. Likewise, DMOs can support the market-making activity of their PDs by putting in place a securities lending facility that will help them cover the short positions they have incurred in the process. The extension of such a facility can actually be beneficial to both parties. A number of similar steps and/or provisions are mentioned in the Handbook.

**Designing a well-performing PD system remains nonetheless a complex process.** It raises a large number of issues of various kinds, firstly, are PDs necessary? By whom should they be appointed? What should their duties and privileges be? How should their performance be appraised? And so on. PD systems that are not efficiently designed are often a big opportunity loss.

**The Handbook builds largely on the practical experience gained from the Gemloc Peer Group Dialogue Forum<sup>3</sup> in addressing the aforementioned challenges.** The plan is to keep this Handbook updated as new designs evolve and additional experience is gathered. Some trends and new issues are already being perceived. Currently, this refers particularly to the shifting emphasis on some PDs' incentives and obligations, and to the changing role of PDs on electronic trading platforms.

**The country illustrations mentioned in the footnotes of the Handbook are examples only.** They are by no means meant to be an exhaustive list. Markets also change fast. As a result, some footnotes may not be up to date any longer by the time this handbook is consulted.

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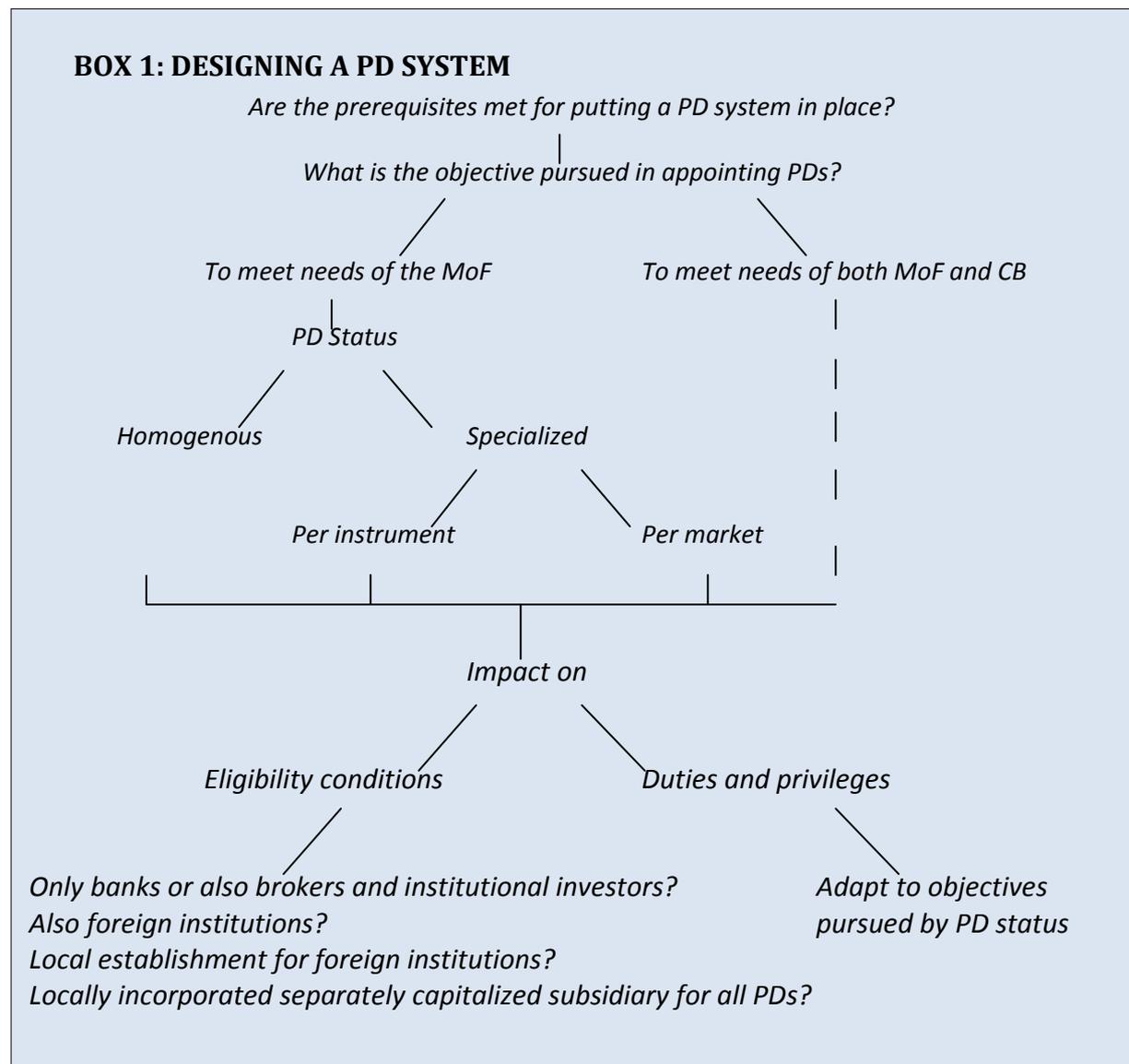
<sup>3</sup> <http://www.gemloc.org>. This Forum was launched by the Gemloc Advisory Services team in March 2009 with the purpose of providing policy makers with a quarterly online forum for sharing experiences and expertise.

## 1.2. Topics Covered in the Handbook

The development of government bond markets involves a broader set of policies than just establishing a PD system. Whilst a PD system is not a necessary precondition for creating a well-functioning government securities market, a PD system can be instrumental in supporting market development. The design of the mix of obligations and privileges is an integral part of the market development strategy.

There are some preconditions for a PD system to work. Once these prerequisites are met, however, PD systems can be organized, and PDs can support DMOs, in many different ways. There is no “one-size-fits-all” PD system.

The conceptual framework supporting the design of a PD system is summarized in the box below.



Two issues need be settled at the outset. The benefits for the local market expected from the establishment of a PD system should be determined first. Some markets function quite efficiently

without PDs being appointed. Second, it must be verified that the prerequisites for a well-functioning PD system are present in the local market (see section 2).

**The next step is to select and appoint the best qualified candidates.** This requires determining the PDs' selection criteria and the procedure for their appointment. A number of issues are raised in the process. Some are of a technical nature, such as certain eligibility conditions for the status of PD, the appropriate number of PDs, who should appoint PDs, and for what period. Other issues have a strategic dimension. This refers to issues such as deciding whether PDs should serve the needs only of the Ministry of Finance (MoF) or also the needs of the central bank (CB) and/or whether foreign institutions are eligible to be appointed as PDs and, if so, whether a local establishment will be required (see section 3).

**PDs systems can be organized in many different ways.** The status of PD always carries both obligations and rights. In both cases, however, different options may apply.

**PDs usually assume six different types of duties.** Some duties are fairly straightforward, such as, undertaking to be the DMO's advisor on debt strategy and market organization, to be the DMO's counterpart for its debt management operations, and to report on their activity, both inter-dealer and with customers. By contrast, the commitment of PDs to bid at auctions and to enhance the liquidity of the secondary market can be expressed in very different ways. The phrasing that matches best with the stage of development of the market and with the capabilities of the PD applicant must thus be determined first.

Some strategic decisions will again need to be made in the process. This applies in particular to the homogeneity of the PDs' status. Should all PDs have the same duties or should some market specialists be appointed (see section 4)?

**PDs are also entitled to some rights and privileges.** These are intended to provide PDs with the tools and/or the motivation to perform. This part of the PD system design process is probably the most complex to complete. There are a wide number of options. Some privileges can be granted by the MoF and some by the CB. Amongst the privileges that can be granted by the MoF, some are of a general nature whilst some are specifically linked to the primary market or to the secondary market. Some privileges have a cost for the DMO and others do not.

The PDs' rights and privileges are a particularly strategic issue. They will in many cases have a direct impact, both on the choice by PDs of the market segment on which they will focus their effort and on the quality of their overall performance (see section 5).

The optimal combination of duties and privileges is a country-specific issue. Yet, there are some general guidelines that are apt to enhance the efficiency of the market making function (see section 6).

**The DMO must manage its relationship with its PDs.** This includes communication to PDs, the monitoring and appraisal of their activity, and the allocation of incentives to the best performers. This part of the PD system design process is also key to support the overall quality and motivation of the PDs (see section 7).

The supervision of PDs must pursue the objective of enhancing transparency in the market, protecting investors, and reducing systemic risk (see section 8). Finally, the dynamic nature of the market merits a review of current and emerging trends in PDs' obligations, rewards and means of interacting with the market through electronic trading platforms (see section 9).

## 2. BACKGROUND

### 2.1. Definition

**PDs are financial intermediaries appointed by a DMO to perform certain specialized functions in the government securities market.** The PDs and the DMO pursue a common strategy to support funding of the government and development of the market. The PD system is the underlying institutional arrangement between the two parties.

### 2.2. History

**The PD system was first implemented in the USA in 1960.** With a few exceptions<sup>4</sup>, the PD system spread first to Europe from the mid eighties and thereafter to emerging markets (Ems) from the mid-nineties.<sup>5</sup>

**Many, but by no means all, industrial countries have a PD system.** For example, Australia, Germany, New Zealand and Switzerland have no PDs.<sup>6</sup> These markets do not see the need for PDs as they function well without them, including an active secondary market. A common feature of the government securities markets concerned is that foreign investors have a large market share.

**Similarly, whilst a number of EMs and developing countries have adopted a PD system, many others have elected not to do so.**<sup>7</sup> Two often-mentioned reasons are that the market is not large enough to support a sufficient number of PDs to ensure competitive behaviour and/or that the investor base is not diversified enough for financial intermediaries to be willing to commit to having a market-making activity.

### 2.3. Benefits Expected from a PD System

**An analysis of the benefits expected from a PD system actually raises the issue of design of, and coordination in, the PD system.** A PD system can be designed to meet the needs of only the MoF or of both the MoF and the CB. From a functional point of view, PDs for government securities should be distinguished from PDs for CB operations. Operationally, however, the same institutions can be awarded both roles, depending on the institutional arrangement. The authority responsible for appointing PDs has to be determined accordingly (see section 3.1.).

**DMOs expect a many different contributions from their PDs.** DMOs depend on their PDs (i) to build a stable and dependable demand for government securities by submitting bids at the auctions and by broadening the DMO's customer base, thereby decreasing market and refinancing risks; (ii) to lower the DMO's cost of funding by enhancing price discovery, thereby contributing to the liquidity of the secondary market, and (iii) to help in establishing the debt management strategy and to facilitate the development of the market by providing advisory support to the DMO. In practice, PDs also improve the DMO's knowledge of the market, strengthen product innovation, facilitate access to end investors and limit the number of counterparts that the DMO deals with.

**It is hard to over-estimate the importance of the contribution that PDs can deliver when the appointment of PDs is appropriate for the conditions present in the market.** PDs know the market

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<sup>4</sup> Brazil in 1974

<sup>5</sup> India in 1996, Korea in 1997

<sup>6</sup> Germany has a "quasi-PD system" by limiting the access to the primary market to banks meeting some conditions, including a minimum market share.

<sup>7</sup> E.g., Costa Rica, Chile, Latvia, Mauritius, Saudi Arabia

best. They are the counterpart of the investors who are the DMO's ultimate target, and play a critical role in helping DMOs meet their debt strategy objectives.

**Nonetheless, it must be emphasized that a PD system is not the only way to reap some of the aforementioned benefits.** As an illustration, in the primary market, final investors can be offered incentives to support auctions of government securities, similar to the incentives offered to PDs. In the secondary market, imposing a price quoting obligation to PDs is not the only way to enhance price discovery.

## 2.4. Risks Created by a PD System

**The principal risks are the limitations to competition and the corresponding potential incentive to collusive behaviour.** These risks can be addressed in two complementary ways. First, a group of PDs sufficiently large to ensure competition must be appointed. Second, an incentive system to reward good performance must be devised that makes it more profitable for PDs to compete than to collude.

**Moral hazard is another risk.** PDs have been selected and appointed by the government. Therefore, some market participants—PDs as well as investors—might believe that the government will not let a PD go under. As a result, some PDs might be inclined to take on more risks than they should. This is an issue to be addressed by the authorities in charge of the supervision of financial intermediaries.

## 2.5. Prerequisites for a PD System to Work

**The common feature of the prerequisites for a PD system to work is that it must be possible to foster a securities market.** A PD is a dealer. Thus, it needs a market to function.

**The corresponding requirements are numerous.** A few of these requirements are: (i) stable macro-economic conditions, (ii) existence of legal and supervisory systems, (iii) adequate payment system, (iv) liberalized interest rates—the government must be committed to a market-based mechanism, (v) stable, predictable and transparent issuance policy—the government must be committed to transparent debt management practices, (vi) diversified investor base, (vii) large enough market to support a sufficient number of PDs to ensure competitive behaviour, (viii) sufficiently large outstanding debt to create liquid issues, (ix) DMO's commitment to developing the market, etc.

Yet another prerequisite is to make a primary dealership a commercially viable proposition for the financial intermediaries concerned (see section 5).

**Government authorities should carefully check whether their domestic market enables them to meet the aforementioned prerequisites prior to considering establishing a PD system.**

# 3. APPOINTMENT OF PDs

## 3.1. Appointing Authority

**PDs can be appointed by different authorities: the DMO or the MoF, the CB, or the MoF and the CB jointly.** When PDs are appointed by the MoF and CB jointly,<sup>8</sup> the application must be approved by both institutions.

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<sup>8</sup> E.g., Brazil, Canada, Greece. In Spain, PDs are appointed by the DMO after a report done by Bank of Spain.

In practice, the most frequently implemented procedure is to have PDs appointed by the DMO<sup>9</sup> or by the MoF.<sup>10</sup> In effect, this is essentially the same thing since the management of public debt is the political responsibility of the Minister of Finance in any case.

Appointment by the MoF is advantageous in that it creates opportunities for synergy with other branches of the government to motivate PDs to perform (e.g., when awarding privatisations).

The appointment of PDs by the CB<sup>11</sup> has the advantage of providing a link to open market operations (OMOs). It may also facilitate the granting of some privileges to PDs (see section 5.3.).

**It is possible for a PD system to be designed to meet the needs of both the MoF and the CB.** Both authorities should then be involved in the appointment.

**However, in many cases, the MoF seems best placed, both to appoint PDs and to manage the relationship.** A DMO can best motivate PDs to perform (see section 5.2.). It is also best placed to support market-making activity by adapting its issuance policy to create liquid markets and by offering PDs a securities lending facility that they can use to cover their short positions<sup>12</sup> (see section 5.2.3.).

## 3.2. Selection Criteria

**Applying for the status of PD can be subject to a number of eligibility conditions. Some strategic issues are raised in the process.**

### 3.2.1. Main Eligibility Conditions

#### (i) Financial strength:

**Financial strength is evidenced by adequate capitalization.** It generally translates into a minimum net worth requirement.<sup>13</sup> Being a PD is a risky business. In the primary market, a PD may end up holding a large securities portfolio which is either too expensive or not saleable. Market conditions may have changed after the auction or the PD may have misjudged market pricing or investors' demand. Similarly, in the secondary market, a PD may have bought securities at a high price or sold too cheap. As a result, losses may be suffered, with the corresponding need for a capital cushion to absorb them.

**The financial strength requirement has some additional advantages.** It restricts the function of PDs to the soundest institutions and limits the risk of future financial problems of PDs.

A minimum credit rating from reputed rating agencies is usually<sup>14</sup> required only to allow a PD to be the DMO's counterpart in transactions involving derivative products (e.g., swaps<sup>15</sup>).

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<sup>9</sup> E.g., Hungary, Ireland, the Netherlands, Portugal Spain, UK

<sup>10</sup> E.g., Belgium, France, Japan, Poland

<sup>11</sup> E.g., USA, Denmark. In Denmark, public debt is managed by the CB.

<sup>12</sup> Only the issuer can technically create securities temporarily when an additional supply is needed to restore the equilibrium of the market; the securities are cancelled thereafter when the reverse repo matures.

<sup>13</sup> E.g., India where the minimum net worth requirement is Rs 50 crore

<sup>14</sup> This does not apply in Singapore where a certain minimum credit rating is an eligibility condition for the status of PD.

<sup>15</sup> A collateral agreement (CSA) is also increasingly required. The CSA is usually unilateral.

**(ii) Current active involvement in government securities market:**

Current active participation in the market is the best evidence of a PD's ability to fulfil the duties assigned to it. Some countries impose certain minimum market shares during a certain period.<sup>16</sup>

**(iii) Management capacity and suitable technological infrastructure:**

The applicant must have the expertise to sustain an active and efficient market for government securities. This includes the technology needed to submit bids at primary auctions, to trade on the secondary market and to report on its activity.

**(iv) Long-term commitment to market development:**

There is no point for either the DMO or the PD to initiate a short-term relationship. In particular, for the financial intermediary concerned, the PD status has a start-up cost that can only be amortized over a certain period.

**(v) Submission of a business plan:**

An increasing number of DMOs<sup>17</sup> require PDs to submit a business plan outlining their strategy and goals with respect to the government securities market. This requirement is not restricted to applicant PDs. Sitting PDs are also required to update their business plan regularly, usually on an annual basis.

**(vi) The applicant must be an organization of good reputation and standing.**

### **3.2.2. Issues for Resolution in Setting Eligibility Requirements**

**(i). Choice between banks only, and banks, brokers, and institutional investors**

**In emerging markets, brokers may have access to a specific customer base.** In addition, the status of PD is sometimes used to entice institutional investors to participate in auctions. However, these are usually only temporary regimes. Their impact can be negative if they deter banks from applying for PD status.

**In mature markets, PDs are almost always banks only.** Banks are the only organizations that have both the capacity and the vocation to develop a customer base and to trade actively on the secondary market. Banks are also the only organisations for which the PD status can be used as a marketing tool to reinforce a customer relationship that is profitable in other fields. As a result, banks can afford to have a break-even or even a loss-making operation in government securities. Thus, banks have a competitive edge over other financial intermediaries.

**(ii) Choice between foreign and domestic institutions**

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<sup>16</sup> In Japan, an applicant PD must have bid at least 3% and taken at least 1% of the planned issue amount during the preceding two quarters; in Greece, a candidate PD has to show active participation in the secondary market for a period of at least 12 months with volumes at least equivalent to that of the two PDs ranked last; and in Italy Candidate Specialists must have fully satisfied the obligations related to the maintenance of PD status for the 12 month period preceding their application.

<sup>17</sup> E.g., Belgium, Canada, the Netherlands

**Allowing foreign institutions to become active in local markets offers several advantages to emerging markets.** Foreign institutions provide greater expertise, increased competition and increased market credibility. They may also expand the scope of financial intermediation with their foreign customer base and increase the availability of capital.

**On the other hand, foreign institutions are often less loyal to the local market.** They do not have the same vested interest in the well-being of the domestic market place as local PDs. Better judgment should thus be exercised in following their recommendations.

### **(iii) Requiring foreign institutions to have a local establishment**

**In government securities markets at an early stage of development, a systematic local presence seems to be necessary.** This was the case in European markets up to the mid-nineties. This requirement was then given up in anticipation of the European Monetary Union that became a reality in 1999. Such requirements still exist in a number of other countries.<sup>18</sup>

**The requirement for a local presence usually rests on one or more of the following two views:** the local presence is an evidence of commitment and/or it is the only way for the government to ensure that their business is conducted in the proper way. Neither view is necessarily true.

**A local presence is an expensive proposition, which may actually not be required for a bank to develop its business in the domestic market.** In addition, the local government can enter into an agreement with the supervisory authority in a country where the applicant PD has a presence of some importance so as to ensure that it is subject to adequate control. This principle has been implemented in the EU. Since the early 2000s, banks registered in at least one EU country can apply for the status of PD in any member state.

### **(iv) Requiring all PDs to have a locally incorporated separately capitalized subsidiary<sup>19</sup>**

This requirement can facilitate the channelling of professional expertise to the new firm by allowing the creation of new career paths and incentive schemes. It is particularly relevant in emerging markets. The objective is to ensure that the business is professionally managed and that risks are covered. In some cases, it can also facilitate supervision from a regulatory perspective. Yet, this requirement involves significant costs for PDs, some of which could be deterred as a result. This drawback needs to be weighed against the expected benefits.

### **3.2.3. Other Eligibility Conditions**

Other eligibility conditions often required are: (i) sufficient management capacity, (ii) adequate staffing and professional skills, (iii) suitable technological infrastructure, (iv) membership in the stock exchange,<sup>20</sup> (v) to be a user of the central counterparty system in the regulated wholesale repo market,<sup>21</sup> etc.

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<sup>18</sup> In Canada, every government securities distributor must have its core domestic fixed income market trading and sales operations for government securities resident in Canada; in Hungary, every PD must have at least one branch office in Hungary.

<sup>19</sup> In India, banks are required to set up separate subsidiaries to be registered as PD. This requirement has been given up by Sri Lanka. However, capital is still to be dedicated to that business line.

<sup>20</sup> E.g., Ireland, UK, Ghana

<sup>21</sup> E.g., Italy

### 3.2.4. Choosing Between Eligible Institutions

**Ideally, the PDs' customer base, product expertise and geographical reach should be complementary.**

As an illustration, the composition of PD groups in European countries shows a careful balance (i) between domestic and foreign banks, (ii) within foreign banks, between European, Anglo-Saxon and Asian banks, and (iii) across all PDs, between regional and international banks. The candidate PD that fits best with the desired balance should therefore be selected in case of an over-supply of eligible applicants. Ideally, the additional PD should have an added value in terms of geographical reach and/or investor base coverage or a special field of expertise.

### 3.3. Number of PDs

**In practice, the number of PDs usually ranges from five<sup>22</sup> to around 25.<sup>23</sup>** Five seems to be the minimum number needed to ensure competition. The mean number for medium-size countries is between 10 and 15.<sup>24</sup>

**It is recommended not to appoint more than the necessary number of PDs.<sup>25</sup>** Too high a number of PDs dilutes their motivation as they have fewer business opportunities. They also have fewer rewards as the issuer must spread them across a higher number of well-performing PDs. The status of PD has less marketing value in the bank's customer base. There is lesser added value to the issuer as the PDs' customer bases overlap and the management of the issuer's relationship with PDs becomes an administrative burden.

**The correct number of PDs is the number that allows the banks to adequately fulfil the duties assigned to them.** It is therefore primarily a function of the size of the debt. The DMO's funding requirements may not be larger than the aggregate PDs' absorption capacity. It is also a function of the extent to which the PDs' customer base, product expertise and geographical reach are complementary.

**It is often advantageous for the DMO to let the market know the target number of PDs, at least as an order of magnitude so as to keep some flexibility.** The motivation of the existing PDs is generally enhanced as a result. It also becomes easier to justify the rejection of some PD applications.

### 3.4. Effective Appointment Date

**Applications are usually accepted any time but appointments follow some calendar.** New appointments are generally announced on the renewal date of the existing ones.

### 3.5. Appointment Length

**PDs should be rotating based on performance. They should thus be re-selected periodically.** The appointment should be long enough to allow new PDs to invest in the relationship, i.e., to adapt to

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<sup>22</sup> E.g., Ireland, Iceland

<sup>23</sup> E.g., USA, France, Italy

<sup>24</sup> E.g., Belgium, the Netherlands

<sup>25</sup> A contrarian view is held by Austria (35 PDs for a small public debt). Austria takes the view that a large number of PDs is needed for competition. It also ensures that the DMO always has a counterpart in the market, whenever needed.

their new status and to justify their start-up expenses. At the same time, the appointment should not be so long that PDs feel they can relax because their position is secure.

In practice, the most frequent periods are one year and two years, in that order. Some countries review the status every six months<sup>26</sup> or every 3 years,<sup>27</sup> or on an ad hoc basis.<sup>28</sup>

### 3.6. Appointment Procedure

**The appointment procedure includes two steps:** confirming the appointment and setting the PDs' duties and privileges.

As regards the confirmation of the appointment, the most frequent procedure is a letter signed by the highest authority involved in the PD selection process, i.e., the CEO of the DMO, or the Finance Minister, or the Governor of the Central Bank, as the case may be. As regards the substance of PDs' duties and privileges, various arrangements can apply. They range from making informal agreements to drafting legally binding agreements.

**In any case, the mutual rights of PDs and DMO must be detailed in a document.** This document can be one of a contract, a memorandum of understanding<sup>29</sup> (MoU), a Code of Duties,<sup>30</sup> or a decree.<sup>31</sup> The first two procedures are widespread. Some countries use both simultaneously.<sup>32</sup>

A contract or MoU has the advantage of being flexible if adaptations are needed during the course of the appointment. The need to check signature powers in the PD's organization is sometimes administratively cumbersome.

A Code of Duties or decree is more straightforward but less flexible.<sup>33</sup>

**In markets evolving rapidly and where priorities can change over time, MoUs seem to be the most efficient procedure.** They are more flexible than legal agreements. In addition, there seems to be no precedent for any legal action taken by a DMO against a PD or vice versa. Both parties have a vested interest in settling any disagreement amicably.

## 4. DUTIES OF PDs

**Defining PDs' duties involves making several strategic decisions.** One of these must be made upfront. Should the status of PD be homogeneous or can PDs be specialized?

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<sup>26</sup> E.g., USA, UK, Singapore

<sup>27</sup> E.g., France

<sup>28</sup> E.g., Finland

<sup>29</sup> E.g., Australia, Austria, Finland, Hungary, the Netherlands, Norway, Turkey

<sup>30</sup> E.g., Belgium, France, Ireland, Portugal, UK, USA

<sup>31</sup> E.g., Greece, Italy, Japan

<sup>32</sup> E.g., Denmark, Belgium used to

<sup>33</sup> Adaptations during the course of the appointment remain possible. The process can be simplified for decrees by creating the legal concept of **procedure manual** (i.e., document signed by the CEO of the DMO or by the Head of Treasury, as the case may be). The decree can then either set only the basic framework leaving details to be settled in the procedure manual or it can allow its provisions of a technical nature to be adapted in the procedure manual.

#### 4.1. Homogeneous vs. Specialized Status

**PDs can be committed to deal in the full range of public debt instruments. Alternately, they can be allowed to specialize in certain instruments and/or market segments.** Both regimes are widely prevalent.

DMOs that subject all PDs to the same obligations<sup>34</sup> take the view that the status of PD is then more transparent to the market and that the PD group is easier to manage. Certain financial instruments are also more attractive for PDs to trade than others. As a result, some DMOs<sup>35</sup> are concerned that they may not have enough PDs for certain debt instruments if the status of PD were split.

Other DMOs deem it more efficient to split PDs' obligations by establishing different tiers of dealers, each tier having separate requirements and objectives. This approach is particularly useful when there is a relatively limited supply of institutions with an expertise covering all debt instruments or when the state of the market is such that the accumulation of obligations significantly increases PDs' costs and/or market risks.

**A large number of DMOs are thus differentiating between their PDs, either for a specific instrument<sup>36</sup> ("single market PDs") or for a specific activity<sup>37</sup> ("market specialists").** Some DMOs also have repo<sup>38</sup> and/or retail<sup>39</sup> specialists. PDs are generally allowed to overlap different market segments, with some exceptions.<sup>40</sup>

#### 4.2. Inventory of Duties

**Most PD obligations are relatively standard. PDs are generally assigned six duties:** (i) to bid on the primary market, (ii) to place government securities with final investors, (iii) to enhance the liquidity of the secondary market, (iv) to be the counterpart of the DMO for certain debt management operations, (v) to advise the DMO on its debt management strategy, and (vi) to report on their activity in the secondary market.

**The common feature of these six duties is that they are all related to the funding of the government.** They are connected to its amount, its stability, its cost and its management.

**The obligations of PDs tend to be materialized in a similar manner by most DMOs.** However, two duties in particular tend to have some country specific features: the obligation to bid at auctions and the commitment to quote prices on the secondary market.

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<sup>34</sup> E.g., Belgium, Finland, France, Hungary, Italy Japan, New Zealand, Norway, Poland, Slovakia, Turkey, USA.

<sup>35</sup> Belgium for the T-Bill market

<sup>36</sup> For bills: Australia, Austria, Canada, Denmark, Netherlands, Portugal, Spain, UK. In the Czech Republic, only Bond Specialists can carry the title of PDs.

<sup>37</sup> Brazil used to have some market makers specialists with duties only on the secondary market, but has shifted in 2010 to a unified set of obligations to all PDs. **Canada** has a separate category of "primary distributors" compared to "jobbers" that have a greater market-making requirement. **Italy** has a two-tier system with PDs and Bond Specialists who have more stringent requirements on the secondary market amongst others.

<sup>38</sup> E.g., Hungary; France used to have this status. However, it was given up when the repo market became liquid and was effectively quoted by all PDs.

<sup>39</sup> E.g., Belgium, Hungary. In India, the RBI experimented in 1996 with a system of "Satellite Dealers" (SDs) whose specific objective was to promote the retail market segment. This system proved not to be as successful as expected, and it has been discontinued. In practice, the status of retail specialists is often significantly different from that of PD.

<sup>40</sup> Brazil limits the number of institutions that can be both PD and market specialist. The objective is to avoid an excessive concentration of market share.

**The six principal duties of PDs are reviewed below.**

#### **4.2.1. To Bid at Auctions**

**By bidding at the auctions, PDs function as a channel between the DMO and final investors.** They build a portfolio of securities that they will sell in the secondary market. The obligation of PDs to participate in auctions decreases the execution risk of the issuer.<sup>41</sup> The introduction of fixed auction calendars has further increased the usefulness of PDs. The issuer is in the market less often and for larger amounts.

**The obligation to bid at auctions generally includes the obligation for PDs to submit a certain minimum amount of bids and/or successful bids.** In both cases, the minimum amount is generally expressed as a certain percentage of the total amount auctioned.

The PDs' obligation to bid at the auctions can be structured in different ways, with respect to both the submission of bids and the submission of successful bids.

**As regards the submission of bids,** PDs may be obliged either to participate regularly at auctions or to submit bids at every auction for a certain minimum amount or threshold.

The two ways of articulating the PDs' obligation pursue the same objective. In both cases, a PD is actually expected to participate in every auction. In the first wording, however, a PD is not formally breaking a commitment if it has exceptionally missed participating in an auction.

The minimum threshold level, if any, should be set with care. A threshold too low entails the risk of a shortfall in underwriting. A threshold too high might strain the PDs' financial capacity.<sup>42</sup>

**As regards the submission of successful bids,** the minimum amount to be accepted is always expressed as a certain percentage of the total amount issued on a competitive basis. However, it can either be a minimum amount at every auction or a minimum amount over a certain period, usually one calendar year or the length of the appointment period.

In both cases, the minimum bidding commitment can be quantified, either as a percentage discretionarily set by the relevant DMO<sup>43</sup> or as a function of a certain reference, such as the number of appointed PDs,<sup>44</sup> the relative size of the PD's balance sheet,<sup>45</sup> or the amount of the PD's trading activity in the secondary market.<sup>46</sup>

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<sup>41</sup> the potential inability to carry out the trade

<sup>42</sup> In any case, DMOs should avoid selling securities in the market at a lower price after the auction. This would cause an immediate loss for those who have bought at the auction with a corresponding loss of credibility for the DMO.

<sup>43</sup> this applies in almost all EU countries

<sup>44</sup> E.g., Austria. The highest minimum percentage technically possible is 100 divided by the number of PDs. The minimum percentage actually required is usually fairly lower than this technical ceiling in order to make allowance for the differences in the PDs' securities buying capacity.

<sup>45</sup> E.g., Egypt

<sup>46</sup> In the UK, the participation of gilt-edged market makers (GEMMs) in auctions is "expected to bear a reasonable relationship with the amount of their trading activity in the secondary market."

#### 4.2.2. To Place Securities with Final Investors

**PDs can be an efficient securities distribution mechanism to their customer base.** In the process of carrying out this duty, PDs effectively act as a government securities sub-depositary. The duty of placing securities with final customers includes doing marketing, research and development, i.e., to actively develop and promote products related to government securities.

#### 4.2.3. To Enhance Liquidity in the Secondary Market

**In most mature markets,<sup>47</sup> as well as in some emerging markets,<sup>48</sup> PDs are committed to provide firm two-way quotes continuously.** A detailed description of some frequent market practices is outlined in appendix 1, which also includes some recommendations specifically for EMs. In many emerging markets, PDs are committed to quote indicative prices only.

**Prices must usually be quoted for some minimum amounts, with some maximum spreads and for a certain minimum number of hours.** The size of the maximum spread can be expressed either as a number<sup>49</sup> or as an order of magnitude.<sup>50</sup>

**This price quoting obligation generally applies both to prices quoted to customers and to prices quoted to other dealers.** The objective of obliging dealers to quote to other dealers is to enhance price transparency by ensuring that the market is well arbitrated.

**Generally, the market making program covers all maturities issued.** However, securities are allocated amongst PDs so that every dealer is committed to quote only a certain number of maturities and every security is quoted by at least a certain number of market makers. PDs increasingly perform their market making obligation on electronic trading platforms.

**PDs that are committed to quote firm prices are often also obliged to make a certain minimum turnover in the secondary market.** The latter obligation tends to be adapted as the market develops. The minimum amount is expressed first as a percentage of the total turnover in the market,<sup>51</sup> then as a percentage of the aggregate turnover done by all PDs, and finally, the minimum amount requirement tends to disappear.<sup>52</sup> The second stage is a normal consequence of the development of the market as a result of which more participants become active in it. The third stage emerges with the realization that the main benefit of a market making commitment is not liquidity but price transparency. Thus the quality of the prices quoted matters more than the volume done, the quality of which is hard to assess in any case.<sup>53</sup>

In some countries, PDs must achieve both a minimum turnover and a minimum success ratio.<sup>54</sup>

**Standard market making rules can apply only in normal market conditions.** This raises the issue of how market making rules can be adapted in the case of disorderly markets.<sup>55</sup>

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<sup>47</sup> E.g., all Member States in the European Union, except Germany, Malta and Cyprus, Canada, Denmark, Iceland, UK, Singapore, etc. The main exception is the US.

<sup>48</sup> E.g., India, Mexico

<sup>49</sup> "x" tics or bps. This applies in electronic platforms.

<sup>50</sup> In Canada, bid and offer prices must be posted at a spread not significantly larger than that of other market participants for a typical trade size; in the UK, PDs are expected to quote reasonable spreads depending on the maturity of the bond, the size of the trade, the time of the day and the condition of the market.

<sup>51</sup> E.g., Korea: 2%

<sup>52</sup> This was the case in the euro zone in 2008.

<sup>53</sup> Two or three PDs can easily boost their turnover by doing in-and-out trading with one another.

<sup>54</sup> E.g., India

**In Europe, most DMOs have taken all or some of the following five steps in exceptional market conditions:**

**(i) To relax the quoting obligation:** DMOs have either widened the allowed maximum bid and offer spread or no longer imposed a maximum spread. DMOs that no longer impose a maximum spread assess the quality of their PDs' performance by comparing the width of the spread quoted by the relevant PD with the average width of the spreads quoted by all PDs.

**(ii) To decrease the number of securities to be quoted by each PD:** In normal market conditions, securities are allocated to PDs so that each security is quoted by a minimum number of (e.g., 4 or 5) market makers. This number has been reduced to 2 or 3 in exceptional market conditions.

**(iii) To strengthen the issuer's support:** DMOs that extend a securities lending facility to their PDs to support their market making activity (see section 5.2.3.) have tended to increase the amount of the securities that they are willing to lend and/or to increase the length of the period during which PDs are allowed to borrow securities.<sup>56</sup>

**(iv) To change the reference for assessing the quality of a PD's price quoting performance:** Initially, the reference most often used by DMOs was the amount traded by the relevant PD on the secondary market. The amount traded was considered to be both the easiest and the best index of the quality and of the timing of the quoted prices. Since the beginning of 2007, however, the prevailing view amongst DMOs in the EU is that the most important contribution of their PDs in unsettled markets is to enhance price transparency (i.e., the permanent availability of firm prices being displayed on screens), irrespective of the amount actually traded. The assessment by DMOs of the quality of the performance of their PDs has therefore shifted from volume to pricing (i.e., time, spread and quantity quoted).

**(v) To increase the rewards offered to PDs:** This has most often taken the form of more generous post-auction non-competitive subscriptions (see section 5.2.2.), either by increasing the maximum amount of the authorized allocation or by lengthening the period during which non-competitive subscriptions can be submitted.<sup>57</sup>

#### **4.2.4. To Advise the DMO**

DMOs expect PDs to advise them on their debt management strategy and on the organization of the market. This duty includes keeping the DMO informed of market developments.

#### **4.2.5. To be the DMO's Counterpart in Debt Management Operations**

**Being the DMO's counterpart in its debt management operations is both a duty and a privilege.** It is a duty in the case of operations that offer PDs no profit opportunity, such as being counterpart in the trades done by a DMO in the money market to manage its daily liquidity position. It is a privilege in the case of profitable debt management operations that are sought after by PDs (see section 5.2.1.).

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<sup>55</sup> "exceptional market conditions"

<sup>56</sup> This has applied only in those countries where these limits are tight in normal market conditions, e.g., **not** in the Netherlands or in Sweden.

<sup>57</sup> Belgium has taken both steps.

#### 4.2.6. To Report on their Activity

**Reporting to the DMO on its activity in the secondary market is typically part of a PD's agreement.** These reports help DMOs in evaluating developments in the market and in individual institutions (see section 7.3).

A DMO also needs to receive qualitative reports from its PDs in order to be informed of their business strategy and implementation, and about the research and marketing efforts they have made to that effect.

#### 4.2.7. Other Obligations

**PDs can assume a number of other commitments in addition to the above mentioned main duties.** As an example, PDs can be required (i) to contribute to an automatic securities lending facility in the clearing house by allowing the clearing house to lend on their behalf some of their securities held in inventory,<sup>58</sup> (ii) to quote prices for government securities at the closing of the market for publication purposes,<sup>59</sup> and (iii) to facilitate an effective retail distribution.<sup>60</sup> The latter commitment applies when authorities perceive that there could be significant demand for government securities from individuals.

The direct sale of government securities in the retail market is a complex issue, particularly when PDs are involved. Operating in the retail market significantly increases costs for PDs. It also creates competition between the bank's products and government instruments within the sales network of the banks.

**In any case, PDs commit to conduct their business in a correct and ethical manner.** This includes avoiding disrupting their auction participation by bidding too aggressively.

## 5. PRIVILEGES OF PDS

### 5.1. General

**The privileges granted by DMOs to PDs follow two objectives.** The first objective is to help PDs perform. This applies particularly in the early stages of market development, due to the absence of efficient supporting market structures.<sup>61</sup> The second objective is to motivate PDs to perform in the most effective manner possible by rewarding good performance. The mix of privileges and supporting arrangements depends on the overall market architecture.

**Some PDs' privileges uniformly apply in all countries that have implemented a PD system,** One example is the exclusive right to carry the title of PD and privileged treatment in getting information from, and in consulting with, the relevant DMO.

**Some other PDs' privileges are being extended by an increasing number of DMOs.** This applies in particular to granting PDs the status of exclusive or privileged counterpart of the DMO for profitable debt management operations. Typical examples are the award of a mandate of lead manager in a

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<sup>58</sup> E.g., Belgium

<sup>59</sup> In the UK, PDs provide end of day closing prices; Poland organizes daily fixing sessions on the electronic trading platform MTS Poland.

<sup>60</sup> E.g., Hungary, Ireland

<sup>61</sup> Some privileges are actually supporting measures allowing PDs to meet some specific objectives for market development (e.g., enhancing the liquidity of the secondary market with a securities lending facility: see section 5.2.3.)

syndication or the DMO's decision to deal only with PDs in the derivatives market. Another privilege increasingly extended to PDs by DMOs is the regular publication of league tables listing the PDs (e.g., the first three or the first five PDs) that have been top performers in the primary and in the secondary market, respectively.<sup>62</sup> The publication of rankings is particularly valuable as a marketing tool for banks. Banks have a customer base that they may want to attract to use the bank as counterparty for their trades in the secondary market for government securities. In markets that have an open auction system, the publication of rankings can also be a valuable recognition for final investors (e.g., insurance companies or pension funds) as evidence of professionalism in their asset management activity.

**Most PDs' privileges are country specific. This applies to both the primary and the secondary markets.** They are briefly surveyed below before being reviewed in greater detail.

**In the primary market** (i.e., principally auctions), a cross-country survey shows a number of options in granting privileges to PDs, such as (i) recognizing the exclusive right of PDs to be direct bidders at auctions, (ii) allowing extra time for PDs to submit bids when other market participants can also be direct bidders at auctions, (iii) paying PDs a commission on successful bids, or (iv) increasingly, granting PDs the right to submit non-competitive subscriptions either at or after the auction.

**On the secondary market**, the most important PDs' privilege is the exclusive access to a securities lending facility. Other privileges can also apply, such as a PD's special privileges to borrow from the central bank, the exclusive right to be a counterpart of the central bank for its open market operations, or the exclusive right to trade in the call market.

**The main PDs' privileges are reviewed in detail below.** The privileges granted by the MoF are reviewed first followed by the privileges granted by the central bank.

## **5.2. Privileges Granted by MoF**

The privileges granted by the MoF can be broken down into three categories: general, primary market related and secondary market related.

### **5.2.1. Privileges of a General Nature**

#### **(i) Exclusive right to carry the title of PD**

**The status of PD has marketing value for a PD.** It enhances the PD's image in the market place. It increases the PD's credibility with the customer base. The value of the title is leveraged when a PD can organize road shows for the issuer. This is an opportunity for the relevant PD to meet the target customer base.

#### **(ii) Privileged treatment in getting information from, and in consulting with, the DMO**

**It is standard practice for DMOs to consult PDs before auctions about the potential appetite of the market for some specific maturities.** PDs can also expect to be regularly consulted on issues related to market development, market structure, regulatory procedures, codes of conduct, etc. PDs might derive an informational advantage by meeting regularly with the DMO.

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<sup>62</sup> E.g., France, the Netherlands

**The value of this privilege should not be overstated by DMOs.** PDs cannot be provided with any insider information. Any market sensitive information that is potentially valuable from a trading standpoint<sup>63</sup> should always be released simultaneously to the market at large.

### **(iii) Privileged counterpart of the DMO for profitable debt management operations**

**All other things being equal,<sup>64</sup> DMOs deal with profitable debt management operations by giving preference to their PDs.**

A profitable debt management operation is an operation that is attractive to a PD due either to the payment of a commission or to the fact that the operation offers a profit opportunity to the DMO's counterpart.<sup>65</sup>

The award of a mandate in a syndicated bond issue is a frequent illustration of the former category.<sup>66</sup> In addition to receiving commission, the PD gets two ancillary benefits: reinforcement of the relationship with the customer base and higher ranking in the syndication league tables. Derivative trades<sup>67</sup> are sought after by PDs inasmuch as they can make a spread in unwinding their position. The privileged status of PDs for these two categories of transactions assumes that the chosen PD has the required expertise for carrying them out in an expert manner.

**These incentives represent a strong motivation tool for PDs and they are costless for the DMO.** Assuming two counterparts have an equal degree of expertise for carrying out a certain transaction, trading with one counterpart rather than another makes no difference for the DMO.

### **(iv) League tables**

**The DMO publishes league tables ranking the best performing PDs.** This is a widespread practice.<sup>68</sup> The publication of league tables reinforces the marketing value of the PD status. It impresses their customer base. Usually, the list mentions only the five best PDs<sup>69</sup> and separate rankings are published for bonds and bills and, in both cases, for the primary and secondary markets. DMOs tend to avoid publishing a global ranking out of concern for preserving their flexibility in allocating rewards to their PDs (see section 7.4.).

## **5.2.2. Privileges related to Primary Market**

### **(i) Exclusive right to participate in auctions**

**The objective is to offer reasonable assurance to market makers that they can acquire in the primary market the supply of securities that they need to support their market making activity.** When other market participants are allowed to bid at the auctions, PDs can see their allocated amount scaled down if the auction is oversubscribed, even though they have bid a correct market price.

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<sup>63</sup> E.g., budget forecasts, buy back plans

<sup>64</sup> principally, a similar degree of expertise for carrying out the relevant transaction

<sup>65</sup> E.g., private placements, issuance activity in foreign currencies, exchange and buy back operations, etc.

<sup>66</sup> In some countries, PDs have the exclusive right to be members of the syndicate for syndicated bond issues.

<sup>67</sup> E.g., interest rate swaps (IRS), options, forward FX

<sup>68</sup> E.g., Austria, Canada, Czech Republic, France, Greece, Hungary, Ireland, Italy, Japan, the Netherlands, Poland, Portugal

<sup>69</sup> The objective is not to harm the reputation of the other PDs

**Auctions where only PDs are allowed to participate are referred to as “closed auctions.” In “open auctions,” all banks and investors registered with the MoF (or with the CB) can directly participate in the primary market.**

**In closed auctions,**<sup>70</sup> only PDs can participate in the auction. Other investors can submit bids only through a PD.

**One of the major advantages of closed auctions is that they strengthen the secondary market.** Closed auctions are often a condition for PDs to accept assuming a market making function. The market making function requires PDs to be either holding an inventory of the traded securities or having reasonable certainty to be able to acquire them at the correct market price in order to cover short trading positions. Closed auctions are the only way for a PD to be given this reasonable assurance, provided the PD bids the correct market price, as in an open auction, PDs risk obtaining only a certain percentage of their bid amount when the auction is over subscribed. The availability of a securities lending facility (see section 5.2.3) reduces the importance of this exclusive access privilege only partially, as such a facility usually provides limited amounts for a limited period of time.

**The drawback of closed auctions is that they can lead to collusive behaviour when the number of PDs is small.**

**In open auctions,**<sup>71</sup> all financial intermediaries and investors registered with the MoF can directly participate in the primary market. The PDs’ right to participate in the auctions is thus shared with other market participants. The advantages and draw backs of open auctions are the mirror image of that of closed auctions.

**Open auctions afford enhanced transparency in the auction process, which is particularly useful when the number of PDs is small.**

**However, they are also administratively more complex to process** and consequently, auction results are slower to be announced. **Wider participation in open auctions may also raise settlement and supervisory issues.** In small EMs when large public investors are allowed to participate directly in multiple price auctions, there is the risk that they may be induced by the authorities to bid at a high price (low yield), which may distort competition and price discovery.

**In practice, OECD countries are split even between closed and open auction systems. In EMs, both types of auctions are commonly used.** Closed auctions are often associated with PD systems in which the PDs’ underwriting support to the auctions is important (see section 4.2.1.). DMOs should then be prepared to trade off a more predictable coverage for a possibly higher average cost. Auctions can be more open if underwriting is not essential and there is only a general commitment to bid by PDs. The potential disadvantage of having a more limited number of participants in closed auctions should be weighed against the advantage of stimulating the secondary market.

#### **(ii) Allowing extra-time to submit bids at auctions<sup>72</sup>**

The right to submit bids closer to cut-off time can confer PDs a significant commercial advantage over competitors.

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<sup>70</sup> E.g., Austria, Australia, Belgium, Czech Republic, Finland, Greece, Hungary, Iceland, Ireland, the Netherlands, Norway, Slovakia

<sup>71</sup> E.g., Canada, Denmark, Italy, Japan, New Zealand, Portugal, Spain, Turkey, UK, US

<sup>72</sup> E.g., Spain

### **(iii) Payment of a commission on successful bids**

Successful bids on which a commission is paid can also include bids submitted by PDs for their own account<sup>73</sup> or only bids submitted by PDs for their customers' accounts.<sup>74</sup>

### **(iv) Exclusive right to submit non-competitive subscriptions (NCS)**

**PDs can be granted the exclusive right to bid at "second round sales." This right can be exercised either at or post auction.** In both cases, the price of the NCS is usually based on the average auctioned price in the competitive round or the cut-off price of uniform price auctions.

#### **(a) PDs' NCS exercisable at the auction**

A specific amount can be set up in advance for PDs. The objective can be either to give PDs an exclusive right only on part of the auctioned securities, putting PDs in competition with other bidders for the remainder, or to give PDs the assurance of acquiring at least a certain percentage of the securities auctioned.

#### **(b) PDs' NCS exercisable post auction**

**The right to submit NCS after the auction is a valuable privilege.** It is tantamount to the DMO offering PDs a call option at a fixed price on the auctioned security. If the market price of the security concerned has risen in between the time of the auction and the time the NCS can be exercised, then the beneficiary of the NCS cashes in an immediate profit equal to the difference between the two amounts. NCS exercisable post auction are, therefore, typically an exclusive PDs' right. The benefit of NCS can be awarded either to all PDs<sup>75</sup> or only to the best performing ones.<sup>76</sup>

A survey was conducted in July 2009 to map different NCS practices in the framework of the Gemloc Advisory Services Peer Group Dialogue.<sup>77</sup> The results of this survey and an outline of the procedures implemented in the EU are shown in appendix 2 and appendix 3.

**The authorized amount of every PD's NCS is usually calculated by reference to the performance of the relevant PD on the primary market.**<sup>78</sup> Usually, NCS are allocated amongst PDs as a fixed percentage (e.g., 10 %, <sup>79</sup> 15% or 20%<sup>80</sup>) of the amount of the successful bids done by the relevant PD at the relevant auction. Alternatively, the percentage applies to the average amount of its bids over the last "n" auctions (e.g., the last 4 auctions) in the relevant maturity segment. As the potential profit on NCS is generally higher on the longest maturities, the price of which is more volatile, some issuers<sup>81</sup> split the auctioned securities in maturity segments and then calculate the amount of the authorized NCS on the average amount of the PD's successful bids in the relevant maturity segment.

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<sup>73</sup> India has a pre-auction which sets the size of the underwriting commitment and the commission for that commitment

<sup>74</sup> E.g., Egypt

<sup>75</sup> still the most frequent practice at this stage

<sup>76</sup> E.g., Belgium, the Netherlands

<sup>77</sup> [www.gemloc.org](http://www.gemloc.org)

<sup>78</sup> In Korea, 20% of the amount of successful bids of the relevant PD at the auction; in Belgium, the average amount of the relevant PD's successful competitive bids in the same maturity range over the last two auctions expressed as a percentage of the total amount auctioned over the corresponding period. In some countries, a certain percentage of the total amount auctioned is set aside for non-competitive bids and this amount is shared only between the "x" best performing PDs.

<sup>79</sup> E.g., Italy

<sup>80</sup> E.g., Belgium

<sup>81</sup> E.g., Belgium amongst others

**In practice, the date of submission of post auction NCS ranges from one or two days<sup>82</sup> to up to seven<sup>83</sup> calendar days after the date of the auction.** The longer the period, the more valuable the option is for PDs.

**In the euro zone, two DMOs<sup>84</sup> are offering some additional “special NCS” which are specifically linked to their PDs’ market making activity.** A fixed percentage (e.g., 5 %) of the amount auctioned is allocated between the “n” best performing market makers<sup>85</sup> proportionately, according to the average amount of their successful bids as determined above. In other words, eligibility for the reward is determined by the ranking of the relevant PD in the secondary market and the size of the reward is determined by the participation of the PD in the primary market.

**NCS are an attractive proposition for DMOs for two reasons. First, the DMO is indirectly compensated for granting the option.** PDs tend to bid more aggressively and for larger amounts at the auctions in order to increase the authorized amount of their NCS. In mature markets, PDs incorporate at least part of the value of the option in their bid price. The DMO’s funding cost decreases as a result.

**Second, the option does not necessarily represent an additional cost to the DMO.** The granting of NCS is commonly viewed as an additional cost to the DMO, the amount of which increases when the date of exercise of the NCS lengthens. This is only partially correct. Admittedly, NCS have the drawback of creating some uncertainty regarding the total amount that will actually be issued. This uncertainty increases with the size of the authorized NCS. NCS can complicate liquidity management as a result. However, this is not a direct cost.

**Consider, for example, an NCS of 10% of the amount of the auction, exercisable on the day following the auction.** A DMO should be indifferent between issuing 100 today or issuing 90 today and 10 tomorrow at today’s price. The cost of funding is the same in both cases. The issuance of 10 tomorrow at today’s prices might look like an opportunity loss for the DMO if tomorrow’s price happen to be higher than today’s. In fact, it is not. A DMO is constrained by its issuance calendar. It could not have taken advantage of tomorrow’s higher prices in any case.

**However, this reasoning cannot be pushed to the extreme by significantly postponing the date of exercise of the NCS.** The objective of the DMO is to have a funding cost that matches the average cost of funds in the market over a certain period. The NCS is an option that the PD will exercise only when prices are higher. Thus, if a DMO issues the same amount on a competitive basis at every auction, the global amount issued<sup>86</sup> will be higher at the auctions that are followed by a day with lower interest rates. The odds of this happening are 50/50 on the day following the auction. They remain reasonably close to that level up to one week after the auction. For longer periods, however, a built-in bias would be created for auctions to be largest when yields are declining, and conversely. The DMO’s cost of funding would then rise to a level higher than the average cost of the market.

**Provided the period of exercise of NCS is not excessively extended, there is an interesting possible trade off for DMOs.** The value of the option for PDs is a function of both the authorized amount of NCS and their exercise date. So, DMOs can decrease the amount of NCS and keep the value of the

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<sup>82</sup> most frequent practice today

<sup>83</sup> E.g., Belgium

<sup>84</sup> Belgium and the Netherlands so far. Other DMOs could follow.

<sup>85</sup> These DMOs appraise the market maker’s activity from some or all of the following four standpoints: size of turnover, width of spreads, number of securities quoted and number of hours quoted.

<sup>86</sup> i.e., competitive bids and NCS

option constant by moving back their exercise date. The extent of the uncertainty, created by NCS, to the amount that will actually be issued decreases accordingly.

**Some emerging markets may confront an important constraint in using post auction NCS as a motivation tool for their PDs.** PDs must be able to sell their securities in the market in order to cash in their profit on NCS when the option is “in-the-money.” To that effect, at least some degree of liquidity in the secondary market is required.

### 5.2.3. Privileges related to Secondary Market

#### (i) Exclusive access to a securities lending facility<sup>87</sup>

**The main objective of a securities lending facility (SLF) is to support the PDs’ market making activity by helping them to cover short trading positions.** Market makers incur short positions when they are lifted on firm prices quoted for a security that they are not holding in inventory. SLFs are described in more detail in appendix 4.

**When an SLF is provided, any PD should be eligible to use it to borrow any government security.** This applies irrespective of whether the PD in question was or was not obliged to quote prices continuously for the specific security that it is seeking to borrow. PDs are usually not obliged to quote prices continuously for all government securities (see section 4.2.3). Nonetheless, all PDs are by definition market makers for all government securities since they must quote prices on request at the very least to their customers.

**An SLF can also be viewed as a way to increase the overall liquidity of the market by allowing a temporary increase in the amount outstanding of some bond issues.** In the Netherlands, for example, PDs have access to an SLF for every bond until such time as the nominal outstanding amount of the bond in question reaches euro 10 billion. Under the SLF, PDs are entitled to obtain part of the unsold portion of the bond, up to a maximum equal to the difference between the volume outstanding and the threshold of 10 billion euro, until the settlement date of the next issuance for the bond concerned.<sup>88</sup>

**However, the use of an SLF is generally more limited.** Limitations apply both on the amount than can be borrowed and on the period.<sup>89</sup> The justification is the concern not to distort the market (see below) and to avoid the risk of facilitating the taking of speculative short positions.

**In all cases,<sup>90</sup> the SLF facility should be extended at market rates or slightly above that level.<sup>91</sup>** The PDs’ market making activity should be supported without distorting market prices. PDs should also take recourse to the SLF only as a last resort in order not to undermine the interbank market.

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<sup>87</sup> This privilege is granted by a very large number of countries, e.g., virtually all European countries, Mexico, Singapore, USA, etc.

<sup>88</sup> When the next moment of issuance is not published, the maximum term for borrowing under the SLF is one month.

<sup>89</sup> In Belgium, the maximum amount that can be borrowed by a PD is euro 100 million for bonds and euro 100 million for bills, and in principle, the maximum period is one week.

<sup>90</sup> apart from duly motivated exceptional market circumstances such as a squeeze deliberately engineered by some market participants

<sup>91</sup> In Denmark, the fee is 20 bps per annum. The securities may be borrowed for a period of up to 5 trading days. In Belgium, the repo rate is Euro OverNight Index Average (EONIA) minus a spread of at least 25 bps.

**A securities lending facility is generally structured as a securities repurchase transaction.** The objective is to protect the DMO against credit risk. In both cases, securities lending and repo, the relevant securities can be created by the issuer if it does not already hold them in portfolio.<sup>92</sup> The newly created securities are then cancelled at the maturity of the transaction.

**(ii) Exclusive right to strip and reconstitute bonds<sup>93</sup>**

This privilege has a commercial value for PDs. It offers PDs a profit opportunity on trades. Strips also diversify market demand for the underlying bond.

**(iii) Exclusive right to participate in bond exchange operations<sup>94</sup>**

This exclusive right is often complemented by the status of exclusive or privileged DMO counterpart for buy backs of securities in the secondary market.

### **5.2.4. Other Privileges**

A number of other privileges are sometimes granted, such as: an exemption from the requirement to submit payment at the time of bidding or exclusive access to the screens of inter-dealer brokers.<sup>95</sup>

## **5.3. Privileges Granted by Central Bank**

In some countries,<sup>96</sup> PDs are ensured a privileged position in both the government securities market and the money market.

### **5.3.1. Exclusive or Privileged Counterpart for Open Market Operations**

In the US, PDs are the only institutions that are approved to conduct business directly with the New York Federal Reserve in the framework of its open market transactions, both for repo and for outright purchase operations. PDs are also the only institutions that have access to the Fed's daily securities lending operations.

In the UK, PDs that have signed the relevant legal documentation may have access to certain special repo facilities.

### **5.3.2. Borrowing Privileges with CB**

PDs can be given access to a short term facility from the CB on a secured basis if market financing is not readily available. This privilege is subject to a maximum amount related to the borrower's net worth.<sup>97</sup>

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<sup>92</sup> Some DMOs hold a certain percentage of the auctioned securities on their books with a view to having the possibility of intervening in the secondary market thereafter, e.g. Germany.

<sup>93</sup> E.g., Belgium, France, Greece, Hungary, Japan, the Netherlands, Spain, UK

<sup>94</sup> E.g., Belgium, Czech Republic, Denmark, Hungary, Ireland, Italy, Norway, Portugal, Spain, Turkey, UK

<sup>95</sup> E.g., UK

<sup>96</sup> E.g., Brazil, Canada, India, Thailand, USA

<sup>97</sup> E.g., Canada, India, Mexico. In Turkey, the CB provides a YTL liquidity facility for PDs through open market operations. The maximum amount of liquidity that can be provided to PDs is 10% of the net amount of securities purchased in the primary market.

In other countries, a line of credit can be extended by the CB on preferential terms in order to help market makers carry an inventory of the securities in which they make markets. This is the case primarily in developing markets.<sup>98</sup> In some countries,<sup>99</sup> PDs also have banking facilities with the CB.

In the US, PDs cannot borrow funds from the Fed but they can borrow securities from the Fed's portfolio during its daily securities lending operations (see section 5.3.1.).

### **5.3.3. Exclusive Access to Call Market**

The objective is to offer PDs some liquidity to help them fulfil their obligations effectively. This policy has been implemented in India. It is in the process of being phased out.

## **6. BALANCING OBLIGATIONS AND PRIVILEGES TO ENHANCE THE EFFICIENCY OF MARKET MAKING**

The optimal combination of obligations and privileges is a country specific issue. Yet, some general guidelines can apply to EMs.

**The objective of enhancing the efficiency of market making can be achieved in four different ways.** They can be applied individually or simultaneously. These are: (i) to increase the market makers' focus by limiting the number of securities to which their quotation applies (ii) to decrease market makers' risks by providing them with the appropriate tools to hedge or to finance their positions, (iii) to enhance the motivation of market makers by offering more attractive rewards to the best performers, and (iv) to make market making the principal function of some financial intermediaries.

**Establishing market making as the principal function of some financial intermediaries has the advantage of meeting two of the aforementioned objectives simultaneously.** It increases focus and it limits risks. It also offers the opportunity to take advantage of the specific market making expertise of some market participants, as the case may be.

**In 2003, Brazil divided its PDs in two groups: PDs and specialist dealers.** The primary difference between the two groups is the weights applied in evaluating their performance. For PDs, the main criterion is the primary market (35%); for specialists, it is the secondary market (49%). The reform pursued two objectives: more efficient price discovery in the primary and secondary markets, and increased liquidity and competitiveness in the secondary market (see section 4.1.).

## **7. MANAGEMENT OF RELATIONSHIP WITH PDs**

**The relationship between a DMO and its PDs cannot simply be regulated by laws and decrees. It must be managed by DMOs.** The objective is to ensure that the relationship is mutually beneficial and profitable. Financial intermediaries are not charitable organizations. They must be financially motivated to perform.

Appropriate monitoring and evaluation are crucially important to enhance the overall quality and motivation of the PDs group. The best PDs should be rewarded, poorly-performing PDs should be penalized, and they must all know where they stand.

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<sup>98</sup> In India, the Reserve Bank of India (RBI) takes into account both the bidding commitment and the performance of the relevant PD in the primary and secondary market to determine the amount of the liquidity support to which it is eligible. In Belgium, the CB has extended a special line of credit to PDs until 1999.

<sup>99</sup> E.g., India

**The management of the relationship between DMO and PDs rests on four pillars: communicating, motivating, monitoring, appraising and sanctioning.** These are reviewed below.

### **7.1. Communicating: PD Meetings**

**It is standard practice for DMOs to convene their PDs for a meeting at least once or twice a year.** The objective is to keep PDs informed about relevant developments in debt management and to seek their opinion on special topics, if any.

PD meetings are generally not the appropriate forum for making final decisions on controversial issues unless the discussion has been prepared well in advance, thereby giving the PD's representatives the opportunity to check the position of their senior management ahead of the meeting.

**It is also standard practice for DMOs to consult PDs before auctions.** The objective is to obtain the PDs' input on the maturities that are being sought by the market and on the order of magnitude of the amounts that the market could absorb. These consultations are usually done by telephone conference in order to save PDs' time.

**Some DMOs also report to PDs after the auction regarding the repartition between PDs of the allocated amounts.**<sup>100</sup> The repartition is anonymous. The objective is to inform PDs as to whether the distribution of securities is well spread or concentrated in a few hands. This is a useful guide to PDs when they start quoting prices in the secondary market.

### **7.2. Motivating: Allocation of Incentives**

**DMOs have a vested interest in making the PD status an attractive proposition for the banks.** If not, PDs will stop investing in providing the necessary capital and expertise to become an active participant in the government securities market. Banks are in business to make a profit.

**Allocating incentives requires DMOs to exercise judgment. It is counterproductive to reward only the few best performing PDs.** The best performers should be rewarded more than the good performers but the good performers should obtain some reward also. Not doing so would demotivate PDs that, although making a worthwhile contribution, are unable to reach top rankings. The objective of the debt manager should be to motivate all PDs to perform. It is equally counterproductive to allocate rewards mechanically to every PD, each one on its turn. PDs would then feel that special efforts are not being rewarded. Thus, they would no longer extend themselves and would simply wait for their turn to be rewarded. The answer to this challenge is to allocate rewards to all PDs who deserve one but more generously and more frequently to the best performing PDs as a function of the quality of their contribution.

**DMOs are advised not to establish a completely mechanical link between the results of the appraisal procedure and the allocation of rewards.**<sup>101</sup> PDs sometimes have different fields of expertise which the debt manager must try to take advantage of in the most efficient way. Thus, all PDs cannot be appraised against the same standards. In addition, experience suggests that the PDs'

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<sup>100</sup> E.g., France, Belgium

<sup>101</sup> This is sometimes a source of tension between the front office and the middle office or between the DMO and its administrative supervisory authorities. In both cases, the latter tend to want a quantitative and mechanical procedure that they can control whilst the DMO is intent on keeping the flexibility of exercising some degree of judgment that they can justify.

motivation is best supported by matching PDs' legitimate expectations, and these expectations should be managed by the DMO to remain realistic. Subject to that, PDs' legitimate expectations are the main determinant of the effectiveness of the rewards offered by the DMO to support their motivation. It is seldom productive to reward a PD more than legitimately expected. It is always detrimental to reward the PD less. In the latter case, the DMO should endeavour to explain that it has not been a discretionary decision.<sup>102</sup>

**A well managed PD relationship is evidenced by two facts.** First, a good average performance of all PDs. It shows that PDs have been selected well and that they know what is expected from them. Second, the absence of complaints expressed by PDs. This shows that the management of the relationship by the DMO is perceived by PDs to be reasonable and predictable.

### 7.3. Monitoring: PD Activity Reports

PD activity reports can be obtained from two different sources: the PDs themselves or third parties such as electronic trading platforms.

#### 7.3.1. Reports Submitted by PDs

**PDs carry out two important duties on the secondary market: placing securities with final investors and enhancing market liquidity.** The second duty implies both quoting prices and actually trading securities. DMOs also expect their PDs to keep them informed of developments in the market.

**DMOs are thus interested in knowing what types of counterparts their PDs have been dealing with and what kind of securities they have traded.** These data are useful for a DMO to appraise the quality of its PDs' performance, to check whether PDs are achieving the strategic objectives, if any that have been assigned to them,<sup>103</sup> to assess whether the composition of the PD group is balanced well with complementary skills, to perceive market trends, and so on.

The information sought can normally be provided to DMOs only by the PDs themselves. The production of that information needs to be computerized to be feasible and accurate. PDs must therefore adapt their internal software accordingly.

**In the euro zone, every DMO used to have its own specific reporting format up to 2005.** Such "tailor-made" activity reports were expensive to produce by PDs, particularly for PDs who are active in several government securities markets in the euro zone. The reports were also administratively cumbersome to compile. The accuracy of the submitted figures was of uneven quality as a result.

**In 2006, all DMOs in the euro zone agreed on an identical "harmonized reporting format" (HRF) for PD activity reports.**<sup>104</sup> The HRF is made of three different templates, identical for every type of security.<sup>105</sup> A sample HRF and further details can be found at [http://ec.europa.eu/economy\\_finance/efc\\_en.htm](http://ec.europa.eu/economy_finance/efc_en.htm).

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<sup>102</sup> E.g., it is materially impossible to reward the relevant PD because there were no available rewards to be offered

<sup>103</sup> E.g., to focus particularly on a certain geographical area, category of investors or type of instrument

<sup>104</sup> DMOs have also made the use of the HRF compulsory for PDs with the exception of Germany where the use of the HRF is optional for the banks belonging to the auction group (Germany has no PD system: see section 2.2). Alternatively, the banks can use Germany's own reporting matrix. This applies as the latter rests on a different reporting approach (trade-by-trade instead of aggregated monthly figures).

<sup>105</sup> The set of 3 templates is completed separately for every type of security, one for bills, one for fixed-rate bonds, etc.

**DMOs using (or planning to use) PDs that are active in several government securities markets are strongly recommended to format the templates of their PD activity reports according to some internationally accepted standard.** It has been quite beneficial in Europe to do so. The corresponding reduction in the PDs' administrative burden has enabled DMOs to request PDs to produce more detailed and more accurate figures. For EMs, it might remove a possible entry barrier in the local market for some banks.

Within the local market, a division of reporting obligations should be agreed upon in order to avoid duplications, given the large number of authorities potentially interested (market authority, central bank, bank supervision, etc.).

### **7.3.2. Reports Submitted by Electronic Platforms (e-Ps)**

In markets where PDs trade government securities in the secondary market using electronic platforms, some complementary information can be obtained from the e-Ps about the quality of a PDs' contribution to price transparency. E-Ps can provide DMOs with statistics on the number of securities quoted, the average size of quoted quantities and spreads, and the time quoted.

## **7.4. Appraising: PD Appraisal Procedures**

### **7.4.1. General**

This section describes a type of appraisal procedure that is fairly widely implemented in the EU. It is not meant to be construed as being the only good procedure nor even the most effective one.

**Designing a PD appraisal procedure is a three steps process.**

**The first step is to make an inventory of the various components of the PD's expected performance** (evaluation criteria). Some components will be quantitative. They can be expressed as a certain amount of currency (e.g., sum of the bids submitted by a PD at an auction). Others will be of a qualitative nature (e.g., quality of the advice provided by a PD to the DMO).

**The second step is to weigh each activity as a function of its importance to the DMO. The third step is to make three policy decisions.** These refer to the disclosure of the mechanics of the appraisal procedure, the disclosure of the results of the appraisal procedure and the impact of the appraisal result on the allocation of rewards.

### **7.4.2. Inventory of Evaluation Criteria**

A sample PD evaluation matrix is appended as an illustration (appendix 5). It is technically possible to refine the appraisal of PDs' behaviour at auctions by including in the analysis the quality and the stability of their performance and the quality of their price discovery (appendix 6)

#### **(i) Quantitative criteria**

**The quantitative criteria include all the components of the PD's activity that can be expressed in terms of volumes or market share** (e.g., the amount of successful bids at the auctions).

In mature markets, business volumes are increasingly duration weighted in order for the appraisal procedure to use comparable figures when calculating aggregates.<sup>106</sup> This is easy to implement in the primary market. The maturities are known to the DMO. On the secondary market, however, a duration weighting is technically possible only if PDs report their transactions by maturity ranges.

In some markets,<sup>107</sup> the evaluation is based only on quantitative criteria.

## **(ii) Qualitative criteria**

**A variety of criteria are used in practice:** market information, trade execution, advice,<sup>108</sup> research, promotion of the issuer, and overall relationship. Some DMOs use customer surveys to gauge investors' satisfaction,<sup>109</sup> etc.

### **7.4.3. Combining Quantitative and Qualitative Criteria**

**In order to provide a global scoring, the quantitative and qualitative criteria should be combined.** To reach this stage, the most effective way is to split the various evaluation criteria, first by type (quantitative or qualitative), then by category (e.g., in the quantitative type, by instrument: bills or bonds), and then by sub-category (e.g., for each of the bills and bonds, by market segment: primary or secondary). The same procedure can be applied on the qualitative side by splitting activities into sub-activities (e.g., splitting advice into strategic advice on market organization and trading advice on market developments). A sample matrix is provided in appendix 5.

### **7.4.4. Assigning Weights to Evaluation Criteria**

**The variables which have the strongest impact on the global ranking of a PD are the weights assigned to the appraised activity.** The assignment of weights is a two step process. First, a weighting is done item by item. The instruments and market segments are weighted relative to one another within each category. The assigned weights total 100% in each category or sub-category. This enables crosschecking the validity of the reasoning by proceeding step by step, from general to detail. Second, a global weighting is done. The weight of each item is calculated relative to all other items. This second step provides yet another check that the assigned weights are reasonable, in addition to producing a global scoring.

**The main issues involved in assigning weights are summarized below.**

#### **(i) Primary vs. secondary market**

In mature markets, a small majority of DMOs are giving a larger weight to the primary market.<sup>110</sup> This is the case when the availability of funding (primary market) is ultimately more important than its cost (secondary market). Other DMOs assign either the same weight to both markets<sup>111</sup> or a larger

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<sup>106</sup> Alternatively, some coefficients can be used by assigning weights. Germany follows this procedure by assigning weights ranging from 1 for Bubills to 25 for 30-year bunds. The same is true for Italy, where the weights for T-bills are, 0.25, 0.50, 1 and 2 for 3-, 6-, 12- and 24- months respectively. For T-bonds, the weights are 2.5, 4, 7, 9.5 and 13 for 3-, 5-, 10-, 15- and 30- years, respectively. Hungary uses approximately the same weights as Italy.

<sup>107</sup> E.g., Canada

<sup>108</sup> France aptly defines "advice" as "participation in the improvement of AFT's framework and means of action"

<sup>109</sup> E.g., France

<sup>110</sup> E.g., Austria, Belgium, France, Germany, Italy (as of June 2006)

<sup>111</sup> E.g., Ireland, Portugal, the Netherlands (as of June 2006)

weight to the secondary market.<sup>112</sup> Not surprisingly, the countries assigning a larger weight to the primary market have generally (but not always) large financing requirements.

**(ii) Bonds vs. bills**

Typically, weights increase when maturities lengthen. Long-term funding is more valuable to the DMO and more risky for the PD to provide than short-term funding. In Europe, only one country (Germany) publishes the weight assigned to each instrument. The weight increases with the maturity.

**(iii) Quantity vs. quality**

In the EU, the mean weight assigned to the qualitative assessment is around 20%. Keeping this weight low is appropriate for two reasons. First, it is to a large extent unavoidably subjective. This applies particularly to the DMOs that disclose their criteria only as “quality of the overall relationship” with no further detail. Second, a high weight could encourage some banks to erroneously believe that the quality of their advice is sufficient to fulfil their obligations, leaving other PDs to bear the burden of the daily quantitative chores.

**Illustrations**

As of June 2006, the following countries used the weights mentioned below.

	Primary	Secondary	Qualitative	Other
France	40	30	30	-
Greece	35	55	10	-
Italy	58	19	19	4
Portugal	40	40	20	-
Spain	30	60	20	-

**7.4.5. Disclosure of Evaluation Criteria**

**This is a complex issue.** On the one hand, PDs should be clear on what is expected from them. Appraisal procedures should be objective, fair and implemented with discipline. On the other hand, some PDs who are aware of the arithmetic formula supporting their assessment could be tempted to adapt their activity with a view to doing some statistical optimizations that may not necessarily be the most productive activity.

**Some DMOs have therefore elected to express the importance of the PDs’ performance in the various market segments in general terms only.** They do not disclose the evaluation process<sup>113</sup> or the amount of the relative weights used by the DMO to score the global performance.<sup>114</sup> These DMOs usually emphasize that they value consistency in quality across all criteria and consistency over time for each criterion.<sup>115</sup> Some DMOs add that the expected contributions from PDs are too diversified and complex to be collapsed simply into an arithmetical summation of individual scores.

<sup>112</sup> E.g., Finland, Greece, Spain (as of June 2006)

<sup>113</sup> E.g., Austria

<sup>114</sup> E.g., Belgium

<sup>115</sup> To quote the Belgian DMO: “Our principal criterion is a consistently good overall performance. We recognize that some PDs may, due to their specific business strategy, have a competitive hedge or handicap in some fields. Yet, a PD who shows a consistently good overall performance will be given more credit than a PD who is very good in one field but very weak in some other ones or, in particular, a PD whose performance is uneven over time. Whilst the qualitative performance does influence the overall evaluation, it will not-irrespective of how good it is- compensate for a poor performance on the quantitative side.”

**Other DMOs are publishing their appraisal procedures in full detail.** This includes the weights assigned to the different activities.<sup>116</sup>

#### **7.4.6. Disclosure of Appraisal Results**

**Appraisal results can be disclosed to the PD concerned and/or also to third parties.** These include the public at large. A policy decision is therefore needed on these points.

##### **(i) Disclosure to the PD concerned**

Ranked results are always communicated to the relevant PD on a one-to-one basis. The quality of the performance of other PDs is usually not disclosed, except as a group, and always on an anonymous basis.

##### **(ii) Disclosure to PD's Management**

It is sound practice that the results of the appraisal be communicated to the PD's senior management with a letter sent to the CEO or member of the Board responsible for financial markets. This is an opportunity for the DMO to steer the PD's activity in the desired direction.

##### **(iii) Disclosure to the Public**

DMOs typically release to the public only selected information concerning ranking results (see section 5.2.1.)

#### **7.4.7. Sanctioning Poor Performance**

PDs whose performance is the poorest are not chosen by DMOs as counterparts for profitable debt management operations (see section 5.2.1.). In extreme cases, the appointment is not renewed, is suspended or terminated.

## **8. SUPERVISION OF PDs**

The supervision of PDs follows three objectives: to ensure that markets are fair and transparent, to protect investors and to reduce systemic risk. Prudential oversight should allow the authorities to monitor the PDs' capital position and to ensure that in the event of a PD's failure, if it so happens, the entire market is not disrupted.

The supervisory authority can be the MoF / treasury or the DMO itself, the central bank, the regulatory authority in charge of capital markets,<sup>117</sup> or a combination of the above.

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<sup>116</sup> E.g., France, Greece, Italy, Portugal, Spain

<sup>117</sup> which can itself be a separate institution or part of the MoF or the CB

## 9. CURRENT ISSUES AND TRENDS

### 9.1. Trends in PDs' incentives and obligations

#### 9.1.1. PDs' Obligations

**In mature markets, a growing emphasis is being placed on the contribution made by PDs to liquidity in the secondary market,** which PDs facilitate by supporting price transparency through the continuous quotation of two-way prices. This development is partially accounted for by the expanding role of electronic trading platforms in supporting secondary market trading since the early 2000s, particularly in the EMU.

As a result, the weight assigned by DMOs in the appraisal that they do of the quality of their PDs' performance has increased. The value of the rewards that the best performing PDs can obtain has increased likewise (see section 9.1.2.)

**In EMs, DMOs seems to be increasingly responsive to the costs and risks linked to the status of PD.** Several DMOs are **currently** considering the possibility of offering PDs some risk mitigating tools, in particular, by granting PDs access to an SLF to help them cover short positions. The possibility of doing electronic auctions is also a recurrent theme in markets that do not have them yet. Electronic auctions reduce PDs' risks by allowing faster release of auction results.

#### 9.1.2. PDs' Rewards

**DMOs are increasingly concerned with ensuring that the status of PD is an attractive proposition for the institutions concerned.** DMOs have a vested interest in making primary dealership a function worth competing for. In the early 2000, a major development in this respect in the EU was granting PDs the status of exclusive, or privileged, counterpart of the DMO for certain debt management operations that offer a profit opportunity to the financial intermediary involved. A typical illustration is granting a mandate of lead manager in a syndication.

**Since 2008, post auction non-competitive subscriptions are assuming a growing role in the compensation by DMOs of their best performing PDs.** In order to leverage the value of the reward, several DMOs have provided for a special non-competitive allocation offered only to the top performers. In other words, DMOs not only reward the good performers but also have a special reward for the best performers. In the process, DMOs have fostered competition between PDs, which strive to be eligible for these rewards.

### 9.2. PDs and Electronic Trading Platforms

In mature markets, particularly in the EU since the early 2000s, PDs use e-trading platforms to comply with their market making obligation by quoting two-way prices. Initially, most DMOs designated no more than one or at most two "approved" platforms, which PDs were allowed to use to that effect. The objective pursued by DMOs in limiting the number of "approved" platforms *was* to enhance price transparency and market depth, whilst simplifying monitoring by DMOs to ensure that PDs abide by their obligations. Since 2008, several DMOs in the EU have increased the number of "approved" platforms. Most DMOs, however, have done so in a way that deliberately limits their number to a maximum of three or four.

EMs face two challenges in this respect as a function of the level of development of the market. At the start, the issue for the DMO is to assess how it can best contribute to the development of e-trading. Assessing which platform is best adapted to the needs of the market is a particularly

complex task. At a later stage, the challenge becomes how to limit the number of “eligible” platforms so as to avoid jeopardizing price transparency and market depth, and yet preserve a competitive electronic market.

## PDs' QUOTING OBLIGATIONS

### FREQUENT MARKET PRACTICES AND RECOMMENDATIONS FOR EMs

#### 1. General

In most mature markets<sup>118</sup> as well as in some emerging markets,<sup>119</sup> PDs are committed to provide firm two-way prices continuously. Prices must usually be quoted for some minimum amounts, with some maximum spreads and during a certain minimum number of hours. The size of the maximum spread can be expressed either as a number<sup>120</sup> or as an order of magnitude.<sup>121</sup> In mature markets, PDs usually comply with their quoting obligation by quoting on electronic trading platforms. The PDs' market making commitment generally applies to both the prices quoted to customers and the prices quoted to other PDs. The objective pursued in obliging PDs to quote to one another is to ensure that the market is arbitrated.

**By contrast, in most emerging markets, PDs are committed to quote indicative prices only.**

**Irrespective of whether prices are firm or indicative, a market making program typically classifies securities into three different types:** benchmark securities, liquid securities and others. This classification is done by the DMO after consulting with its PDs.

Typically, **benchmark securities** are defined in market making programs as a security (i) issued with a maturity that is a strategic point on the yield curve and (ii) currently being auctioned ("on-the-run") or (iii) no longer auctioned but not replaced yet by an "on-the-run" security for a similar maturity. Usually, benchmark securities must be quoted by all PDs.

**Liquid securities** are securities that are not benchmarks but nonetheless often traded. Liquid securities are allocated between PDs in such a way as to ensure that every security is quoted by a certain minimum number of PDs and each PD has to quote a certain minimum number of securities. Liquid securities are also rotated amongst PDs, e.g., on a monthly or quarterly basis.

**Illiquid securities** are securities that are little traded, e.g., bonds with a life to maturity less than 15 months. Illiquid securities are not subject to a quoting obligation.

#### 1.1. Bills

**Benchmarks bills** are usually defined as the most recent "strategic" maturity currently being auctioned (e.g., 3-, 6- and 12-month). **Liquid bills** are the previous benchmark that has become off-the-run for each of these maturities. The corresponding total number of bills to which a quotation obligation applies is usually around six.

#### 1.2. Bonds

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<sup>118</sup> E.g., all Member States in the European Union, except Germany, Malta and Cyprus, Canada, Denmark, Iceland, UK, Singapore, etc. The main exception is the US.

<sup>119</sup> E.g., India, Mexico

<sup>120</sup> "x" tics or bps. This applies in electronic platforms.

<sup>121</sup> In Canada, bid and offer prices must be posted at a spread not significantly larger than that of other market participants for a typical trade size; in the UK, PDs are expected to quote reasonable spreads depending on the maturity of the bond, the size of the trade, the time of the day and the condition of the market.

In mature markets, **benchmark bonds** are typically the 3-, 5-, 10-, 15- and 30-year bonds currently being issued.

**The allocation of liquid bonds between PDs is done by maturity bucket** (e.g., 2-5 y, 6-10 y, 11-15 y, etc.) in order to ensure a balanced sharing of the maturities along the yield curve between PDs. The allocation is also reviewed regularly (monthly or quarterly) so that the assigned securities rotate between PDs.

## 2. Recommendations for EMs

**PDs are usually obliged to quote prices for government securities in EMs also.** In practice, however, PDs do not always quote, not even on request by customers or counterparties.

**PDs are confronted with several issues specific to EMs.** The public debt book is split between a large number of lines, which each have a small amount outstanding. PDs usually manually input the prices that they display on their screens and they have no risk hedging instruments.

**It is therefore recommended to impose a limited commitment in order to ensure that it can be enforced and to consult PDs prior to imposing it.** Experience teaches that market making obligations are effective only when PDs have been associated with the design of the system and have confirmed that it is a workable proposition.

Specifically, DMOs may consider implementing the market making obligation in such a way that it (i) applies to a limited number of securities, (ii) is enforced during a limited number of hours, (iii) is satisfied with the quotation of an **indicative** bid and offer price for the relevant securities but (iv) commits PDs to quote upon request a **firm** bid and offer price that (a) does not materially differ from the displayed indicative price, (b) is quoted with a certain maximum spread, and (iii) is valid for a certain minimum amount.

As regards,

**1. the number of securities:** it is recommended to initially oblige PDs to quote only benchmarks. Every PD would therefore be obliged to quote eight securities: four bills (3-, 6-, 9-, 12-month last auctioned) and four bonds (3-, 5-, 7-, 10-year).

**2. the number of hours:** it is recommended to limit the number of hours to one hour in the morning (e.g., 10-11 AM) and one hour in the afternoon (e.g., 2-3 PM).

**3. quantities and spreads:** this is to be discussed by the MoF with its PDs and to be set by maturity buckets.

**4. firm price not materially different from displayed indicative price:** the maximum percentage variation should be agreed upon by the MoF with its PDs.

### NON COMPETITIVE SUSCRIPTIONS I

GEMLOC Peer Group Dialogue July 20, 2009

Meeting Minutes (see [www.gemloc.org](http://www.gemloc.org))

<b>Date:</b>	July 20th, 2009
<b>Place:</b>	Conference call led by the WB/Gemloc Team in DC Supported by go-to-meeting conference tool
<b>Time:</b>	8 a.m.-9.30 a.m. (EST time)
<b>Attendees:</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Brazil:</b> Rodrigo Cabral, Lena Carvalho, Guilherme Pedras, Jose Franco Morais (Ministry of Finance)</li> <li><input type="checkbox"/> <b>India:</b> Rabi Sankar (Central Bank)</li> <li><input type="checkbox"/> <b>Italy:</b> Davide Iacovoni, Pierpaolo Battista (Ministry of Economy and Finance)</li> <li><input type="checkbox"/> <b>Malaysia:</b> Kamilah Mohamad, Mohamed Reeza Mustaffa (Central Bank)</li> <li><input type="checkbox"/> <b>Mexico:</b> Rodolfo Campos (Ministry of Finance)<sup>1</sup></li> <li><input type="checkbox"/> <b>Poland:</b> Marek Szczerbak, Robert Zima (Ministry of Finance)</li> <li><input type="checkbox"/> <b>South Africa:</b> Phumzile Maseko (National Treasury)</li> <li><input type="checkbox"/> <b>Turkey:</b> Coskun Cangoz, Ufuk Hazırolan (Undersecretariat of Treasury)</li> <li><input type="checkbox"/> <b>WB/Gemloc Team:</b> Anderson Silva, Phillip Anderson, Yibin Mu, Tamuna Loladze, Varsha Marathe, Baudouin Richard, Catiana García</li> </ul>
<b>Discussion topic</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Primary Dealers' Experience and Practices in the Financial Crisis</li> </ul>
<b>Objectives:</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Presentation by Baudouin Richard, World Bank consultant and former Director of Treasury and Capital Markets in the Belgian Public Debt Management Agency, on primary dealer (PD) adjustments in mature markets as a result of the crisis.</li> <li><input type="checkbox"/> Discussion led by the Brazil debt management office on non-competitive subscriptions as a key incentive to improve PDs performance.</li> </ul>
<b>Issues discussed:</b>	<ul style="list-style-type: none"> <li>• Non-competitive subscriptions have proved to be a strong incentive for PDs</li> <li>• Countries differ in the features and conditions that apply to non-competitive subscriptions, among others, in the following issues: <ul style="list-style-type: none"> <li>✓ Access period to the non-competitive subscription after the competitive auction</li> <li>✓ Size of non-competitive subscriptions</li> </ul> </li> <li>• The longer the <i>access period</i> the larger the benefit for PDs: <ul style="list-style-type: none"> <li>✓ Access periods vary: 3 hours in Brazil, 28.5 hours in Italy, 3 days in France, 7 days in Belgium.</li> <li>✓ Countries had differing views on the direct impact of access periods</li> </ul> </li> </ul>

### NON COMPETITIVE SUBSCRIPTIONS II

#### SUMMARY SURVEY OF PROCEDURES APPLIED IN THE EUROPEAN UNION<sup>122</sup>

##### 1. Countries offering NCSs

All 15 Member States offer NCS to their PDs except:

- **Denmark**
- **Germany:** no PDs, and a selling commission is paid on tap issues placed by banks with customers

Note: **France** offers NCS but their terms are communicated only to PDs

##### 2. Date of exercise (for bonds)

- **Simultaneous** with the auction: UK
- **Auction day:** Slovenia
- **One day after the auction:** Austria, Italy
- **Two days:** Greece, Ireland, Spain
- **Three days:** Belgium (ordinary NCS), the Netherlands
- **Seven days:** Belgium (special NCS)<sup>123</sup>

##### 3. Global amount of NCS

The percentages below apply to the (average) amount issued on a competitive basis at the relevant auction basis (i.e., at a certain number of previous auctions; see point 5 below).

- 10 %: Belgium (special NCS), Italy (for re-openings), UK
- 15 %: Austria, the Netherlands
- 20 %: Belgium (ordinary NCS), Greece
- 24 %: Spain<sup>124</sup>
- 25 %: Italy (for initial openings)

##### 4. Exercise price

**General rule:** weighted average price auctioned or cut-off price when uniform price auction

**Exception:** Portugal is an exception where the lowest price is accepted

##### 5. Basis of calculation of the NCS allocated to a specific PD

**General rule:** the amount allocated to every PD is a function of the amount of this PD's successful competitive bids.

- at the auction: Greece, the Netherlands, Spain

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<sup>122</sup> Source: European Primary Dealerships Handbook, European Primary Dealers Association

The Handbook is published on : <http://www.afme.eu/contactform.aspx?ekfrm=2088>

<sup>123</sup> i.e., additional allocation distributed to the 5 PDs ranking best on the secondary market

<sup>124</sup> i.e., 20% split between all PDs and a 4% split between the PDs ranking best in the evaluation period preceding the auction

- during a certain number of previous auctions
  - 2 auctions: Austria, Belgium (including the auction for which the amount of NCS is calculated)
  - 3 auctions: Ireland,<sup>125</sup> Italy, Portugal, UK (index linked bonds)

**Exception:** global amount of NCS evenly split between PDs

- Slovenia: NCB amount = guaranteed allocation amount / number of PDs
- UK for conventional gilt issues

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<sup>125</sup> Ireland splits the NCS in 2 parts:  $\frac{1}{2}$  PD's market share in last 3 auctions,  $\frac{1}{2}$  PD's market share in placement of retail bonds

### SECURITIES LENDING FACILITY FOR PRIMARY DEALERS

**This note is organized as follows:** The reasons why a securities lending facility (SLF) is a useful tool for DMOs are first determined. The procedures needed to put an SLF in place are then reviewed. Finally, some suggestions are offered for consideration with a view to using an SLF in the most efficient manner possible.

#### 1. Background

**Market participants may need to borrow a specific security for two reasons.** First, to cover or to create a short position. Second, to avoid a delivery fail in the settlement system. On the other end, investors are interested in lending securities as it increases the return on their securities portfolio.

**Securities can be lent in two ways: a loan or a repo.** In a loan of securities, the borrower pays a commission to the lender. In a repo of securities, the borrower remunerates the lender with a cash deposit of which the interest rate is set at a certain spread below the going market interest rate for the period considered. The cash deposit protects the investor against the credit risk. The interest rate spread remunerates the investor for lending the specific security requested by the borrower.<sup>126</sup>

**Clearing and settlement systems often offer an “automatic SLF” to the participants in the clearing system.** This applies when the participants in the clearing system authorize the clearing house to lend all or some of the securities they hold in their securities account to other clearing participants in exchange for a fee. The drawback of this procedure is that the facility works only to the extent that securities are available for lending.

#### 2. Link between securities lending and market making

**PDs need to comply with some market making obligations.** A trader who quotes two way prices may be selling a security that is not held in inventory. The trader may not always be able to cover short positions immediately by buying that security in the market. In the meanwhile, the trader needs to borrow the relevant security in order to deliver it to the buyer. Thus, a PD can make markets only if it is guaranteed to be able to borrow the securities that might be needed as a result.

**DMOs have a vested interest in ensuring that their PDs are able to perform their market making obligation.** A DMO can do so by providing an SLF specifically for its PDs. DMOs are in a unique position to offer such a facility. They are the only market participant who can guarantee the availability at all times of the securities that might be needed by their PDs.

**An SLF also offers two ancillary advantages to DMOs.** First, an SLF can be used as a tool to motivate PDs to perform. This is achieved by offering the SLF on more attractive terms<sup>127</sup> to the PDs

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<sup>126</sup> In practice, repos are used primarily to protect a lender of cash against the credit risk on the borrower. The type of security provided as collateral by the borrower of cash is then indifferent provided the securities in question meet some general eligibility criteria. These repo transactions are referred to as “**general collateral**” or “GC.” By contrast, the repo transactions initiated by a securities trader who wants to borrow a specific security are referred to as “**special collateral.**” The commission charged by the lender will be a function of the degree of availability of the security in question in the market.

<sup>127</sup> E.g., larger amounts or higher interest rate on the funds placed with the DMO (see section 4, items 3 and 5 below)

contributing best to price transparency (i.e., quotation obligation) or to market liquidity (i.e., largest turnover on the secondary market). Second, the SLF provides DMOs with an additional (though typically small) source of funding at an attractive rate.

### 3. Securities lending procedure

**DMOs can provide an SLF to their PDs in two ways: indirect or direct.** In the first case, the DMO supports the automatic SLF provided by the clearing house.<sup>128</sup> It supplies to the SLF securities that the SLF has not been offered by the members of the clearing house participating in the system. In the second case, the DMO supplies the security directly to the PD. Each procedure has its advantages and drawbacks.

#### 3.1. Supporting the automatic SLF provided by the Clearing House

**The DMO opens a securities account in the clearing house.** The DMO can then supply the automatic SLF with the securities needed to meet the PDs' securities borrowing needs. The securities in question can be credited to the DMO's account in two ways.

**3.1.1. The DMO can routinely issue in the framework of its regular auctions an amount of securities somewhat larger than the amount needed to meet its financing requirements.** The surplus of securities is credited to its account with the clearing house.

The practice of auctioning securities for an amount larger than that of the DMO's actual funding needs is applied by the German DMO. The Deutsche Finanzagentur routinely issues securities for an amount equal to about 120% of its funding needs. The objective, however, is only to have a means to regulate the yields in the secondary market by selling the securities on tap in between two auctions.<sup>129</sup>

**3.1.2. The DMO can temporarily create the securities that are needed by the automatic SLF.** This procedure is implemented in three steps.

**(i) creation of the security in the clearing system:** the applicable procedure is identical to that implemented in the framework of any other securities issuance by the DMO (auction, tap, syndication, etc.). The DMO instructs the central bank to post the securities to the credit of its securities account.<sup>130</sup>

**(ii) repo:** the applicable procedure is identical to that implemented in the framework of a standard repo transaction. The corresponding issues to be addressed (legal agreement, valuation of collateral, level of interest rate) are reviewed in section 5 below.

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<sup>128</sup> see section 1 above

<sup>129</sup> The banks active in the German government securities market (Germany has no PDs) dislike this procedure. The corresponding unscheduled supplies of securities to the market create an additional element of uncertainty when trying to forecast the level of yields in the secondary market.

<sup>130</sup> In this case, however, the net debt of the government will not increase as a result. The issued securities are a new liability of the government. However, they are also an asset (account receivable) since they have been lent and are to be returned. Effectively, the government holds a claim against itself. So, the two items net out. As regards the cash leg of the repo, it is a borrowing made by the DMO and it should be accounted as such. However, the funds received are decreasing the funding requirements of the government. Thus, they normally replace other borrowings that would have been done if the lending of securities had not taken place. Net, the operation is thus neutral on the balance sheet of the government.

**(iii) cancellation of the securities lent when the securities loan is repaid:** the applicable procedure is identical to that implemented when a government security is being repaid at maturity. From an operational standpoint, a securities lending facility granted by a DMO to its PDs is thus only a combination of existing standard procedures.

### **3.2. SLF provided directly by the DMO to its PDs**

**In this case, the PD contacts the DMO directly** instead of indirectly through the clearing house that manages the automatic SLF. The DMO can ensure the availability of the needed securities following either one of the above mentioned procedures, i.e., auctioning a supply of securities in excess of its funding needs (see section 3.1.1.) or temporarily creating the securities that a PD wants to borrow (see section 3.1.2.).

## **4. Advantages and drawbacks of the different lending procedures that can be offered to PDs**

**A choice needs being made by the DMO between four different procedures.** The securities can be lent through the automatic SLF of the clearing house or directly. The availability of the needed securities can be ensured by the DMO either by auctioning amounts larger than that of its funding needs or by temporarily creating securities.

**In each of the aforementioned four cases, the DMO is assumed to be willing to lend the securities only to its PDs and preferably on a repo basis,** as opposed to with a loan of securities collateralized by a pledge of securities and remunerated by a commission.<sup>131</sup>

### **4.1. lending securities through the Clearing House**

**This option has two advantages:** it is administratively simpler for the DMO as it steps in only when the clearing house needs support. It reinforces the automatic SLF system of the clearing house.

**This option also has three drawbacks. First, the automatic SLF is administratively more complex for the clearing house to manage.** The clearing house is dealing with two kinds of securities borrowers (PDs and non-PDs) who may have different objectives (to create or to cover a short position and to avoid a delivery failure) and to whom different conditions should apply. The DMO may also wish to apply different conditions within the PDs group depending on the quality of their performance. In addition, an automatic SLF normally steps in only at the end of the day to cover delivery failures. A market making PD may wish to finalize a borrowing of securities during the day.

**Second, the DMO has less flexibility in tailor making the terms and conditions of the securities lending as a function of the PD borrowing them** (i.e., in using the SLF as a tool for rewarding a PD for the quality of its performance). The DMO is not in direct contact with the relevant PD.

**Third, the clearing house presumably prefers to lend securities on a commission basis against the pledge of other securities as collateral rather than on a repo basis.** Clearing houses do not need the cash generated by a repo. In addition, borrowers of securities generally prefer this procedure which saves them the need for borrowing cash. PDs are nonetheless willing to offer cash to the DMO acting as a direct lender of securities as they contact it as a last resort.

### **4.2. lending securities directly**

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<sup>131</sup> Lending securities on a repo basis offers two advantages: it strengthens the repo market and it decreases the mark-to-market valuation risks. Only one security has to be valued (the repurchased security) instead of two (the security lent and the security pledged).

The advantages and drawback of this option are the mirror image of those discussed in section 4.1.

#### **4.3. auctioning an amount of securities larger than that of the funding needs**

The advantage of this option is to be administratively simple for the DMO. Its drawback is to overstate the DMO's funding needs. This might negatively affect the perception of the debt by the market.

#### **4.4. temporary creation of securities**

The advantages and drawbacks of this option are the mirror image of those discussed in section 4.1. In this case, the net debt of the government does not increase as a result of the securities lending. The issued securities are a new liability of the government. However, they are also an asset (account receivable) as they have been lent and they are to be returned. The government thus effectively holds a claim against itself. So, the two items net out. As regards the cash leg of the repo, it is a borrowing made by the DMO and it should be accounted as such. However, the corresponding cash inflow is decreasing the funding requirements of the government. Thus, it normally replaces a borrowing that would have had to be done if the lending of securities had not taken place. Net, the operation is thus neutral on the balance sheet of the government.

## PD APPRAISAL MATRIX

The following is an illustration adapted from the appraisal schedule of a euro zone DMO.

INDIVIDUAL WEIGHTS (%)						GLOBAL WEIGHTS (%)					
QUANTITATIVE 80						QUANTITATIVE 80					
<i>Domestic debt 60</i>						<i>Domestic Debt 48</i>					
Bonds	55	Primary	55	Auctions	100	Bonds	27	Primary	15	Auctions	15
		Secondary	45	Interdealer	40			Secondary	12	Interdealer	5
				Customer	60					Customer	7
Bills	40	Primary	55	Auctions	100	Bills	19	Primary	10	Auctions	10
		Secondary	45	Interdealer	40			Secondary	9	Interdealer	4
				Customer	60					Customer	5
Other	5	Strips	50					Other	2	Strips	1
		Buy backs	50							Buybacks	1
<i>Foreign debt 40</i>						<i>Foreign debt 32</i>					
Syndications			80			Syndications			26		
Private placements			20			Private placements			6		
QUALITATIVE 20						QUALITATIVE 20					
Advice			30			Advice			6		
Marketing			20			Marketing			4		
Other funding			20			Other funding			4		
Auction participation			10			Auction participation			2		
Market information			10			Market information			2		
Administration			10			Administration			2		

**Explanation of the figures****In the individual weights section:**

The sum of all vertical columns is 100%

Eg.: quantitative (80) + qualitative (20) = 100

domestic debt (60 + foreign debt (40) = 100

bonds (55) + bills (40) + other (5) = 100

**In the global weights section**

*The sum of the weights of each sub-category is equal to the weight of the previous category*

Eg. : domestic debt (48) + foreign debt (32) = quantitative (80)

bonds (27) + bills (19) + other (2) = domestic debt (48)

*The weight of each sub-category are obtained by multiplying their **individual weight** by the weight of the previous category (ies)*

Eg.: domestic debt (48) = domestic debt (60) \* quantitative (80)

bonds (27) = bonds (55) \* domestic debt (48)

bond primary (15) = bond primary (55) \* bonds (27)

## ANALYSIS OF PDs' BEHAVIOUR AT AUCTIONS

**By bidding at the auctions, PDs contribute to meeting the funding needs of the government. Technically, DMOs can appraise the quality of this contribution from four standpoints:**

**(i) its amount:** i.e., the importance of the relevant PD's successful bids, both as an absolute amount and relative to that of its peers. Both the absolute amounts and the market share are best duration weighted (or maturity weighted) in order to have comparable figures. The weightings recognize the fact that long maturities are more valuable to a DMO and more difficult to place by PDs. In both cases, a reference period needs to be chosen to provide for a common denominator. A procedure often used is to express nominal amounts as 10-year (or 5-year) equivalents.<sup>132</sup>

The amount of a PD's successful bids relative to that of its peers is the most important criterion for appraising a PD's performance at the auctions. Many DMOs rank their PDs only on that basis. League tables, if any, are published by reference to this criterion.

**(ii) its nature:** have the successful bids been submitted by the relevant PD for its own account or for the accounts of its customers? The latter bids are more valuable than the former. They are more stable, have more potential to grow, and they represent the result of a PD's marketing effort.

Calculating the importance of the customers' successful bids relative to the total successful bids submitted by the relevant PD is also a way to keep a level playing field between PDs. Considering only the absolute amount of customers' successful bids favours the largest PDs.

**(iii) its stability:** A PD performs better when he can be relied upon to be participating in auctions on a regular basis instead of in fits and starts. An efficient way to check this desired stability is to calculate the **dispersion** in the PD's performance, i.e., the deviation from average over a certain period in a PD's ranking for the amount of successful bids.<sup>133</sup>

**(iv) its dependability:** the ratio successful bids to total bids submitted shows whether the PD concerned is really interested in acquiring some securities (i.e., high ratio) or whether the PD is only fishing for an opportunity (i.e., low ratio).

**The above data is presented as a schedule below.**

**The weights in the appraisal of the aforementioned criteria are a judgmental issue.** As an example, amount of successful bids (i.e., PD ranking): 70 %; ratio of successful bids for own account /

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<sup>132</sup> For example, we compare the successful bids of two auctions participants. "A" has obtained 500 at 2 y and 100 at 10 y. "B" has obtained 100 at 2 y and 500 at 10 y. **In absolute terms**, they rank equal with total successful bids of 600. **In maturity weighted terms** (10 y equivalent): "A" has  $300 = (500 * 2/10) + (100 * 10/10)$  and "B" has  $520 = (100 * 2/10) + (500 * 10/10)$ . Using duration weights has the advantage of narrowing the differences (the duration difference is smaller than the maturities difference). However, duration weighting may be more complex for auction participants to understand.

<sup>133</sup> For example, we consider the ranking of 2 PDs over 3 auctions with respect to the amount of their successful bids. We assume PD "A" has ranked 5, 1, and 3, respectively. PD "B" has ranked 3, 3, and 3. Both PDs have an average ranking of 3. E.g., for PD "A":  $(5 + 1 + 3) / 3 = 3$ . However, the deviation from average is 0 for PD "B". It is 1.33 for PD "A"  $(2 + 2 + 0) / 3$ . Note that the sign (+ or -) of the deviations from average is ignored in the calculation.

successful bids for customers: 15%; stability of performance (dispersion): 10%; ratio of successful bids / total bids: 5%.

**A large number of DMOs add some qualitative considerations.** For example, has a PD deliberately attempted to impact market yields either by submitting no (or non-acceptable) bids at the auctions in certain circumstances or by submitting an excessively large amount of bids that could give him the ability of dictating its price to the market or by colluding with other PDs, etc. These considerations raise judgmental issues. They are usually sanctioned by a warning or by the termination of the appointment.

**PRIMARY DEALER “X”**

<b>AUCTION</b>	<b>Auction 1</b>	<b>Auction 2</b>	<b>Auction n</b>
Date			
Security			
Total amount issued			
WAP <sup>134</sup>			
<b>SUCCESSFUL COMPETITIVE BIDS</b>			
Amount			
<b>OTHER SUBSCRIPTIONS</b>			
Amount			
<b>TOTAL SUCCESSFUL BIDS</b>			
Amount			
Market share <sup>135</sup>			
<b>(i) Ranking<sup>136</sup></b>			
<b>(ii) Dispersion<sup>137</sup> and ranking</b>			
<b>CUSTOMER ORDERS</b>			
Amount			
Market share			
<b>(iii) Ranking</b>			
<b>SUCCESSFUL BIDS / SUBMITTED BIDS</b>			
Ratio			
<b>(iv) Ranking</b>			
<b>GLOBAL RANKING</b>			
<b>= (i) * 70 % + (ii) * 10 % + (iii) * 20 % + (iv) * 5 %</b>			

<sup>134</sup> weighted average price (yield)

<sup>135</sup> This is equal to the successful bids of the relevant PD divided by the total successful bids of all PDs. Referring to market share is useful for two reasons. It allows for checking that PDs have fulfilled their obligation. It also helps in the interpretation of league table rankings. Some small differences in volume can sometimes account for significant differences in ranking.

<sup>136</sup> calculated by reference to the PD’s market share

<sup>137</sup> The DMO must decide on which number of auctions the dispersion is calculated. Usually, the dispersion is calculated by reference to the appointment period, i.e., the performance is cumulated from the date of the appointment up to the date of the renewal (or termination) of the appointment.

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