



March 2015

Integrated Protection Schemes

Research Paper

Prepared by the Research and Guidance Committee
International Association of Deposit Insurers

C/O BANK FOR INTERNATIONAL SETTLEMENTS
CENTRALBAHNPLATZ 2, CH-4002 BASEL, SWITZERLAND
TEL: +41 0 61 280 9933 FAX: + 41 61 280 9554
WWW.IADI.ORG

TABLE OF CONTENTS

Executive Summary.....	8
I. Introduction.....	10
II. Overview and Findings of the Survey on IPS.....	13
1. Literature Review and Survey.....	13
2. Overview of Financial Consumer Protection Schemes.....	13
3. Findings of the Survey on IPS.....	19
III. Policy Considerations for the IPS.....	32
1. Background for Adopting an IPS.....	32
2. Pros and Cons of Adopting an IPS.....	35
3. Design Features for Considerations in Adopting an IPS.....	37
IV. Conclusions.....	41
References.....	42
Appendices.....	44

List of Acronyms

DIS	Deposit insurance system
EFDI	European Forum of Deposit Insurers
EU	European Union
FSB	Financial Stability Board
FSN	Financial safety net
IADI	International Association of Deposit Insurers
ICS	Investor compensation scheme
IGS	Insurance guarantee scheme
IMF	International Monetary Fund
IPS	Integrated protection scheme
MOU	Memorandum of understanding

List of Agencies in Tables 1 & 2

<OECD>

Australia	Australian Prudential Regulation Authority (APRA) Securities Exchanges Guarantee Corporation (SEGC)
Austria	Einlagensicherung der Banken&Bankiers GmbH (Austrian Deposit Guarantee Scheme; ADGS)
Belgium	Deposit and Financial Instrument Protection Fund (DFIPF)
Canada	Canada Deposit Insurance Corporation (CDIC) Canadian Investor Protection Fund (CIPF) Property and Casualty Insurance Compensation Corp. (PACICC)
Quebec (Canada)	Autorité des marchés financiers (AMF)
Chile	Banco Central de Chile (Central Bank of Chile)
Czech Republic	Deposit Insurance Fund (DIF) Securities Traders Guarantee Fund (STGF)
Denmark	Guarantee Fund for Depositors and Investors (GFDI) Guarantee Fund for Non-Life Insurance Companies (GFNLIC)
Estonia	Deposit Guarantee Sectoral Fund (DGSF)
Finland	Depositors' Guarantee Fund (DGF) Investors' Compensation Fund (ICF)
France	Fonds de Garantie des Dépôtset de Résolution (FGDR) Fonds de Garantie des Assurances de Personnes (FGAP) Fonds de Garantie des Assurances Obligatoires de Dommages (FGAO/FGTI)
Germany	Entschädigungseinrichtung deutscher Banken (EdB) National Association of German Cooperative Banks (BVR) Guarantee Fund for Private Health Insurers (GFPHI)
Greece	Hellenic Deposit and Investment Guarantee Fund (HDIGF)

	Private Life Insurance Guarantee Fund (PLIGF)
Hungary	National Deposit Insurance Fund (NDIF)
	Investor Protection Fund (IPF)
Iceland	Depositors and Investors Guarantee Fund (DIGF)
	Financial Supervisory Authority (FSA)
Ireland	Irish Deposit Guarantee Scheme (IDGS)
	Investor Compensation Company Limited (ICCL)
Italy	Fondo Interbancario di Tuteladei Depositi (FITD)
	National Guarantee Fund (NGF)
Japan	Deposit Insurance Corporation of Japan (DICJ)
	Japan Investor Protection Fund (JIPF)
	Life Insurance Policyholders Protection Corporation of Japan (LIPPCJ)
	Non-Life Insurance Policyholder Protection Corporation of Japan (NLIPPCJ)
Korea	Korea Deposit Insurance Corporation (KDIC)
Luxembourg	Association pour la Garantie des Dépôts Luxembourg (AGDL)
Mexico	Instituto para la Protección al Ahorro Bancario (IPAB)
Netherlands	De Nederlandsche Bank (DNB)
Norway	Norwegian Bank's Guarantee Fund (NBGF)
	Norwegian Investor Compensation Scheme (NICS)
	Guarantee Scheme for Non-Life Insurance (GSNLI)
Poland	Bank Guarantee Fund (BGF)
	National Depository for Securities (NDS)
	Insurance Guarantee Fund (IGF)
Portugal	Deposit Guarantee Fund (DGF)
	Investor Compensation Scheme (ICS)
	Workers' Compensation Fund (WCF)
Slovak Republic	Deposit Protection Fund (DPF)
	Investor Guarantee Fund (IGF)

Slovenia	Bank of Slovenia (BoS)
Spain	Deposit Guarantee Fund of Credit Institutions (FGD) Fondo General de Garantía de Inversiones (FOGAIN)
Sweden	Swedish National Debt Office (SNDO)
Switzerland	esuisse Deposit Protection of Swiss Banks and Securities Dealers (SDP)
Turkey	Savings Deposit Insurance Fund (SDIF) Investor Protection Fund (IPF)
UK	Financial Services Compensation Scheme (FSCS)
USA	Federal Deposit Insurance Corporation (FDIC) Securities Investors Protection Corporation (SIPC) National Organization of Life and Health Insurance Guarantee Association (NOLHGA) National Conference of Insurance Guarantee Funds (NCIGF)

<Non-OECD>

Albania	Albanian Deposit Insurance Agency (ADIA)
Azerbaijan	Azerbaijan Deposit Insurance Fund (ADIF)
Brazil	Fundo Garantidor de Créditos (FGC)
Brunei	Brunei Darussalam Deposit Protection Corporation (BDDPC)
Bulgaria	Bulgarian Deposit Insurance Fund (BDIF) Investor Compensation Fund (ICF) Security Fund (SF)
Colombia	Fondo de Garantías de Instituciones Financieras (Fogafin)
Hong Kong	Hong Kong Deposit Protection Board (HKDPB) Investor Compensation Company (ICC)
India	Deposit Insurance and Credit Guarantee Corporation (DICGC) Insurance Regulatory and Development Authority (IRDA)
Indonesia	Indonesia Deposit Insurance Corporation (IDIC) Securities Investor Protection Fund (SIPF)

Jamaica	Jamaica Deposit Insurance Corporation (JDIC)
Kazakhstan	Kazakhstan Deposit Insurance Fund (KDIF) Insurance Payment Guarantee Fund (IPGF)
Liechtenstein	Deposit Guarantee and Investor Protection Foundation of the Liechtenstein Bankers Association (DGIPF)
Malaysia	Malaysia Deposit Insurance Corporation (MDIC) Capital Market Compensation Fund Corporation (CMCFC)
Nicaragua	Fondo de Garantía de Depósitos de las Instituciones Financieras (FOGADE)
Romania	Bank Deposit Guarantee Fund (BDGF) Investor Compensation Fund (ICF) Security Fund (SF)
Russia	Deposit Insurance Agency (DIA)
Serbia	Deposit Insurance Agency of Serbia (DIAS)
Singapore	Singapore Deposit Insurance Corporation (SDIC) Singapore Exchange (SGX)
Taiwan	Central Deposit Insurance Corporation (CDIC) Taiwan Insurance Guaranty Fund (TIGF)
Thailand	Deposit Protection Agency (DPA)
Uganda	Bank of Uganda (BoU)
Ukraine	Deposit Guarantee Fund (DGF)
Uruguay	Corporación de Protección del Ahorro Bancario (COPAB)
Venezuela	Fondo de Protección Social de los Depósitos Bancario (FPSDB)
Zimbabwe	Deposit Protection Corporation (DPC)

Executive Summary

Following the recent global financial crisis, the issue of financial consumer protection has received greater emphasis globally and efforts are being made to enhance such protection. Jurisdictions are taking measures to enhance not only depositor protection but also protection of investors and policyholders. Some jurisdictions, including Serbia, Malaysia and Singapore, have placed the function of investor or policyholder protection with the existing deposit insurer. In addition, several jurisdictions – Hong Kong, Indonesia, Jamaica, Kazakhstan, and Russia among others – have expressed their intention to expand protection schemes in an integrated manner. An integrated protection scheme (IPS) is defined as a system where a single agency, usually a pre-existing deposit insurer, adds or provides a guarantee or protection to investors in securities firms (ICS) and/or policyholders of insurance companies (IGS) in addition to depositors in deposit-taking financial institutions (DIS), for the loss of insured funds or unsatisfied claims in the event of a member institution's failure.

This study aims to examine the current state of integrated protection schemes worldwide, review the advantages and disadvantages of integrated protection schemes vis-à-vis sectoral schemes, and discuss the policy implications for jurisdictions considering the adoption of an integrated protection scheme. To that end, existing literature on financial consumer protection schemes was reviewed and a detailed survey of the practices of members of the International Association of Deposit Insurers (IADI) and the European Forum of Deposit Insurers (EFDI) was conducted.

Out of a total of 61 jurisdictions analyzed through a review of survey responses and existing literature, 17 have an integrated protection scheme. Of those 17, 12 protect both depositors and investors, while 3 jurisdictions (Australia, Malaysia, and Singapore) cover both depositors and policyholders. The UK and Korea, meanwhile, provide the broadest form of protection, covering all three categories of financial consumers (albeit differently).

These integrated protection schemes were analyzed with regard to design

features, which include: the relationship with the financial supervisory authority; the limit and scope of coverage; funding mechanisms; and resolution powers. Except for Greece and Serbia, 15 integrated protection agencies work together with integrated supervisory authorities, which enables more effective coordination and cooperation within the financial safety net framework. All integrated protection schemes, except for Korea, have varying coverage limits for depositors, investors and insurance policyholders.

Also presented in this paper are design feature considerations for adopting an IPS derived from, among other things, the IADI Core Principles for Effective Deposit Insurance Systems (Core Principles). Since each jurisdiction has unique economic and financial environments, designing and implementing an integrated protection scheme must take into account such jurisdiction and industry specifics. Some suggestions for designing an effective IPS are presented. First, an IPS must have operational independence. Second, the limit and scope of coverage should align with its design features and consideration should be given to the characteristics of the respective financial sub-sector. Third, a funding mechanism, including back-up financing in emergency situations, should be arranged in advance. Fourth, an effective resolution regime should be established, including the designation of the responsible resolution authority.

Due to limited data and insufficient literature, this study only provides an overview and some design features of IPS. More detailed theoretical and empirical analysis of IPS remains for future research.

I. Introduction

The recent global financial crisis has uncovered shortcomings (e.g. inadequate coverage, co-insurance, no protection for some financial sectors, etc.) in financial consumer protection. As financial consumer protection has implications for financial stability, concerted efforts are being made to address these gaps. One of the reforms is to enhance or streamline institutional arrangements for financial consumer protection. As a result, several jurisdictions have introduced protection schemes for investors and/or policyholders. Serbia set up an investor compensation scheme in 2011, while Greece, Malaysia, Singapore, Indonesia and Hong Kong have adopted or are preparing to adopt an insurance guarantee scheme. Meanwhile, other jurisdictions including Jamaica, Kazakhstan, Russia and Liechtenstein have expressed an interest in introducing protection schemes other than for depositor protection.¹ In general, there is a growing trend toward enhancing financial consumer protection.²

As there is no 'one-size-fits-all' model, the institutional structures for financial consumer protection vary across jurisdictions. In general, which model to adopt depends on the existing structure of financial supervision and consumer protection, and the nature of the financial markets.

When designing a financial consumer protection framework, there are a number of general considerations. First, should the financial consumer protection function be established within or separate from financial supervision? Second, if the decision is to create a separate entity, a jurisdiction may then have to decide on whether to create separate schemes for depositors, investors and policyholders or place the function with a single agency, usually in a pre-existing depositor protection scheme. An example of the former is Greece, which established a separate agency in 2010 for general policyholder protection.

¹ Jamaica has conducted studies and consultations with stakeholders regarding establishing compensation schemes for the non-deposit-taking sector (insurance, securities and pensions). However, at the time of writing a final policy decision had not been made.

² Schich and Kim (2011) report that, among the 34 OECD member countries, 32 have an explicit deposit insurance scheme, 29 have an investor compensation scheme and 18 have an insurance (life and/or general) guarantee scheme.

Examples of the latter include Serbia, Malaysia and Singapore, where the mandate of the deposit insurer was expanded to cover investors or policyholders. An integrated single agency model and a multiple (separate) agency model both have their advantages and disadvantages.

With the blurring of demarcation lines between financial sectors and the emergence of innovative financial products, financial services have become increasingly complex, and many financial institutions have restructured to become financial conglomerates or financial holding companies. In order to effectively deal with this development, many jurisdictions have decided to integrate financial supervision and are also gradually shifting toward integrated financial consumer protection schemes.³ The Korea Deposit Insurance Corporation (KDIC) and the Financial Services Compensation Scheme (FSCS) in the UK already have integrated protection schemes which cover investors and policyholders as well as depositors. Other jurisdictions, too, have integrated schemes to protect depositors and either investors or policyholders.

Recognizing this trend, this study aims to gather information about the current state of integrated single agency schemes (or integrated protection schemes; IPS) worldwide, highlight the advantages and disadvantages of an IPS and the lessons learned for jurisdictions considering the adoption or enhancement of such a scheme. To accomplish this, a literature review of financial consumer protection schemes was carried out and a detailed survey was conducted involving members of IADI and EFDI. An attempt to identify the theoretical basis for IPS in the current literature yielded very sparse results, as is the case for integrated supervision. However, the survey results provided useful background information on the basis for the adoption of an IPS, its advantages and disadvantages and some of its key design features.

The key terms used in this paper are defined as follows.

³ Among the 100 countries studied by IMF (2006), 59 have an integrated supervisory authority.

An IPS is defined as a system where a single agency, usually a pre-existing deposit insurer, provides a guarantee or protection to investors in securities firms (investor compensation scheme; ICS) and/or policyholders of insurance companies (insurance guarantee scheme; IGS) in addition to depositors in deposit-taking financial institutions (deposit insurance scheme; DIS), for the loss of insured funds or unsatisfied claims in the event of a member institution's failure. This definition excludes all types of protection schemes other than DIS, ICS, and IGS.

A fully integrated supervisory agency is defined in IMF (2006) as an agency that is in charge of the (micro) prudential supervision of at least the three main segments of most financial sectors – banking, insurance, and securities markets.

The structure of the paper is as follows. Chapter II summarizes the current state of financial consumer protection schemes in OECD and non-OECD jurisdictions based on literature review, survey responses and an analysis of the features of existing IPS. Chapter III explores the background and arguments for and against the adoption of an IPS, and discusses the key considerations when designing such a scheme. Chapter IV concludes with a recap of policy implications and a discussion of the possible direction of future research.

II. Overview and Findings of the Survey on IPS

1. Literature Review and Survey

The IPS Subcommittee circulated a survey questionnaire to members of IADI and EFDI.⁴ The primary purpose of this survey was to assess the progress of IPS within a broader financial consumer protection context. Forty-nine schemes from 46 jurisdictions responded to the survey.⁵ In addition to an analysis of the survey results, a literature review was also undertaken. Schich and Kim (2011) and OECD (2011) each provided a detailed report on financial consumer protection systems and insurance guarantee schemes in OECD member jurisdictions. Oxera (2005) and Oxera (2007) presented a comprehensive overview of investor compensation schemes and insurance guarantee schemes in EU member states. For deposit insurance, IADI (2011) and IADI (2012) survey databases, as well as other sources, were analyzed. The Subcommittee also drew upon the websites of IADI (www.iadi.org) and EFDI (<http://efdi.eu>), and annual reports published by individual protection schemes.⁶

2. Overview of Financial Consumer Protection Schemes

Table 1 shows the types of protection schemes in each OECD jurisdiction. Among the 35 jurisdictions in the OECD, the majority have both deposit insurance and investor compensation schemes, while only a few have an insurance guarantee scheme. As for deposit insurance systems, all except for Israel and New Zealand protect depositors.⁷ With regard to investor

⁴ Seventeen members from 14 jurisdictions participate in the IPS Subcommittee. They are Indonesia, Jamaica, Japan, Kazakhstan, Korea (Chair), Malaysia, Nigeria, Singapore, Taiwan, Tanzania, Trinidad and Tobago, the UK, the USA, and Zimbabwe.

⁵ The number of responses does not match the number of countries because, in several countries, multiple organizations answered the questionnaire: CDIC and AMF (Quebec) in Canada; EdB and BVR in Germany; and BDGF and ICF in Romania.

⁶ Where there was a discrepancy between survey answers and data in Schich and Kim (2011), the relevant country's website or annual report was consulted to reconcile the difference.

⁷ Israel and New Zealand have no explicit financial protection schemes in any of the financial sectors. However, in Israel, when a financial institution gets into trouble, the

compensation schemes, all member jurisdictions except Chile, Israel, Mexico, New Zealand and Switzerland provide such protection. For life insurance policyholders, only 10 OECD jurisdictions have a protection scheme.⁸ On the other hand, a slightly higher number of jurisdictions (18) protect general insurance policyholders.⁹ A total of nine jurisdictions – Canada, France, Germany, Japan, Korea, Poland, Spain, the UK and the USA – protect both life and general policyholders. The areas shaded in yellow in Table 1 represent jurisdictions with an IPS where the deposit insurer also protects investors and/or policyholders. Of the OECD members, 13 jurisdictions – Australia, Austria, Belgium, Quebec (Canada), Denmark, France, Germany, Greece, Iceland, Korea, Luxembourg, Sweden and the UK – have IPS in place. The table does not include motor vehicle guarantee funds, which are established for different reasons, e.g. to protect victims of untraced or uninsured drivers.

In the case of Canada, the province of Quebec has its own financial regulator, the *Autorité des Marchés Financiers* (AMF), which protects both depositors and investors.¹⁰ In the USA, although depositor and investor protection are provided by federal agencies, policyholder protection is state-based.

Bank of Israel is required to act. More recently, New Zealand has also adopted a temporary deposit insurance scheme in response to the recent global financial crisis.

⁸ Canada, France, Germany, Greece, Japan, Korea, Poland, Spain, the UK and the USA.

⁹ Australia, Canada, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Korea, Norway, Poland, Portugal, Spain, Turkey, the UK and the USA.

¹⁰ The AMF of Quebec (Canada), which is a member of IADI, participated in the IPS Subcommittee survey.

Table 1. Financial Consumer Protection Schemes: OECD Jurisdictions

Protection Schemes – OECD Jurisdictions (34)				
Jurisdiction	DIS	ICS	IGS-Life	IGS-General
Australia	APRA	SEGC		APRA
Austria	ADGS			
Belgium	DFIPF			
Canada	CDIC	CIPF	Assuris	PACICC
Quebec (Canada) ¹⁾	AMF			
Chile	Central Bank			
Czech Republic	DIF	STGF		
Denmark	GFDI			GFNLIC
Estonia	DGSF			APSF
Finland	DGF	ICF		JGMNLI
France	FGDR		FGAP	FGAO/FGTI
Germany	EdB		Protector	GFPHI
Greece	HDIGF		PLIGF	
Hungary	NDIF	IPF		
Iceland	DIGF			FSA
Ireland	IDGS	ICCL		
Israel	-	-	-	-
Italy	FITD	NGF		GFHV
Japan	DICJ	JIPF	LIPPCJ	NLIPPCJ
Korea	KDIC			
Luxembourg	AGDL			
Mexico	IPAB			

Netherlands	DNB	ICS		
New Zealand	-	-	-	-
Norway	NBGF	NICS		GSNLI
Poland	BGF	NDS	IGF	IGF
Portugal	DGF	ICS		WCF
Slovak Republic	DPF	IGF		
Slovenia	DGS-BoS	ICS-BoS		
Spain	FGD	FOGAIN	CCS	CCS
Sweden	SNDO			
Switzerland	SDP			
Turkey	SDIF	IPF		AA
UK	FSCS			
USA	FDIC	SIPC	NOLHGA	NCIGF

Note: 1) AMF in Quebec (Canada) is not a nationwide protector.

Sources: Oxera (2005 and 2007), Schich and Kim (2011), OECD (2011), IADI Survey (2013)

Table 2 provides a summary of protection schemes in 26 non-OECD jurisdictions.¹¹ Compared to the OECD jurisdictions, there are fewer investor compensation schemes and insurance guarantee schemes in non-OECD jurisdictions. Liechtenstein, Malaysia, Serbia and Singapore are the only four jurisdictions with an IPS.

¹¹ The data for these jurisdictions' are from their responses to the IPS Subcommittee survey.

Table 2. Financial Consumer Protection Schemes: Non-OECD Jurisdictions

Protection Schemes – Non-OECD Jurisdictions (26)				
Jurisdiction	DIS	ICS	IGS-Life	IGS-General
Albania	ADIA			
Azerbaijan	ADIF			
Bangladesh	Bangladesh Bank			
Brazil	FGC			
Brunei	BDDPC			
Bulgaria	BDIF	ICF	SF	SF
Colombia	Fogafin			
Hong Kong	HKDPB	ICC		
India	DICGC		IRDA	IRDA
Indonesia	IDIC	SIPF		
Jamaica	JDIC			
Kazakhstan	KDIF		IPGF	IPGF
Liechtenstein	DGIPF			
Malaysia	MDIC	CMCFC	MDIC	
Nicaragua	FOGADE			
Romania	BDGF			
Russia	DIA			
Serbia	DIAS			
Singapore	SDIC	SGX	SDIC	
Taiwan	CDIC		TIGF	TIGF
Thailand	DPA			

Uganda	BoU			
Ukraine	DGF			
Uruguay	CPAB			
Venezuela	FPSDB			
Zimbabwe	DPC			

Sources: Oxera (2005 and 2007), Schich and Kim (2011), OECD (2011), IADI Survey (2013).

3. Findings of the Survey on IPS

The list of OECD and non-OECD jurisdictions with an IPS is presented in Table 3. Out of a total of 61 jurisdictions, 17 have an IPS as defined in this study.¹² The most common form of IPS is one that protects both depositors and investors. Quebec (Canada) and 11 European jurisdictions have such schemes. There are three jurisdictions that protect both depositors and policyholders, but not investors. Of these three, in Malaysia and Singapore the deposit insurers (MDIC and SDIC, respectively) protect both life and non-life policyholders. In Australia, APRA provides protection to depositors and non-life policyholders. The UK and Korea, meanwhile, provide the broadest form of protection, covering all three categories of financial consumers that the present study is concerned with.

Table 3. Jurisdictions Providing IPS

DIS+ICS	DIS+IGS		DIS+ICS+IGS
	Both Life and Non-Life	Non-Life Only	
Austria, Belgium, Quebec (Canada), Denmark, France, Germany, Greece, Iceland, Liechtenstein, Luxembourg, Serbia, Sweden	Malaysia, Singapore	Australia	Korea, UK
12	2	1	2

An IPS can take different forms depending on its organizational nature. First, there are jurisdictions, such as Australia, Quebec (Canada), Belgium and Sweden, where the financial regulator, central bank or other government agency is responsible for integrated protection services. In Australia, APRA, which is the financial regulator, has provided protection for depositors and non-life

¹² Quebec (Canada) has an integrated protection scheme. For Belgium, Denmark, Iceland, and Luxembourg, the data are from Schich and Kim (2011). Other data are from the IPS Subcommittee survey findings.

policyholders since October 2008. For this purpose, the Australian government established the Financial Claims Scheme (FCS) within APRA. The AMF in Quebec (Canada) regulates financial markets, and administers both the Deposit Insurance Fund and the Financial Services Compensation Fund. Belgium's central bank manages both the deposit guarantee fund and the investor compensation scheme. The SNDO in Sweden, which is a government agency under the Ministry of Finance, protects both depositors and investors.

The second type of agency with such a responsibility is the bankers' association. In the case of Germany, a subsidiary of the Association of German Banks, the Entschädigungseinrichtung deutscher Banken (EdB), protects depositors of private banks and investors.¹³ The DGIPF in Liechtenstein is also run by the bankers' association.

The third type of agency is private organizations. The HDIGF in Greece, established in 2009, is a private organization jointly managed by the Bank of Greece, the Hellenic Bank Association, the Ministry of Economy and Finance, and the Association of Greek Cooperative Banks. Sixty percent of its initial funding came from the central bank.¹⁴ The highest decision-making body of the HDIGF, the Board of Directors, is composed of seven members, of which the Chair is chosen from one of two Deputy Governors of the Bank of Greece, while three of the six remaining members are appointed by the Bank of Greece. A rather similar situation prevails in France, with a private organization in charge of a general interest mission, under a joint undertaking between banks, the financial supervisor and the Ministry of Finance.

Lastly, in Korea, Malaysia, Serbia, Singapore and the UK, the protection agencies operate as separate and operationally independent public organizations.

¹³ There are six systems in Germany: two statutory DGSs supervised by the German Federal Financial Supervisory Authority (one for private banks and one for public sector banks); two additional depositor protection funds offering supplemental coverage for the same credit institutions on a voluntary basis; and two institutional protection schemes safeguarding the viability of cooperative banks and savings banks in conformity with the EU Directive (quoted in FSB (2012)).

¹⁴ The HDGF, which was the predecessor to the HDIGF, was established in 1995.

1) Relationships between IPS and Financial Supervisory Authorities

As an important component of the financial safety net, the structure of a financial protection scheme should align with the financial supervisory system. With the failure of a financial institution, financial supervisory authorities and financial consumer protection agencies have responsibilities for ex ante supervision and ex post consumer protection, respectively. Therefore, it would be fair to assume that, to a certain extent, the form of ex ante supervision influences the structure of ex post consumer protection. Table 4 shows the types of financial supervisory systems adopted by jurisdictions with integrated protection services. While 12 of them have adopted integrated supervisory systems, Greece and Serbia have different supervisory authorities for different financial sectors. In the case of France and Luxembourg, banks and securities firms are supervised by the same authority and insured by the same protection scheme. In Malaysia, Bank Negara Malaysia (BNM), the central bank, regulates banks and insurance companies and the MDIC insures both.

Table 4. Type of Financial Supervision in Jurisdictions Providing an IPS

Integrated Supervision	Composite (Banking and Securities)	Composite (Banking and Insurance)	Individual Supervision
Australia, Austria, Belgium, Quebec (Canada), Denmark, Germany, Iceland, Korea, Liechtenstein, Singapore, Sweden, UK ¹⁾	France, ²⁾ Luxembourg	Malaysia	Greece, Serbia
12	2	1	2

Notes: 1) The UK Financial Supervisory Authority (FSA) was split into two entities in April 2013: the Prudential Regulation Authority (PRA) for prudential purposes and the Financial Conduct Authority (FCA) for regulation of business conduct and consumer protection.

2) In France, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) is responsible for the supervision of deposit-taking institutions and investment firms, while the Autorité des Marchés Financiers (AMF) is the regulator for financial markets.

2) Coverage Limit and Scope of the IPS

Table 5 lists the coverage limits of IPS by sector. With the exception of Korea, which applies a uniform coverage limit of KRW 50 million (USD 45,000) to all sectors, all other IPS have varying limits for depositors, investors and insurance policyholders. In terms of deposit insurance, most European jurisdictions insure deposits up to EUR 100,000 (USD 129,400), as required by the EU Directive on Deposit Guarantee Schemes. Singapore has the lowest limit at SGD 50,000 (USD 40,730), followed by Korea (KRW 50,000,000; USD 45,000) and Serbia (EUR 50,000; USD 64,700). For investor compensation, the EU Directive on Investor Compensation Schemes requires a minimum coverage level of EUR 20,000 (USD 25,900). While Austria, Belgium and Serbia cover up to EUR 20,000, the coverage level in France includes EUR 70,000 (USD 90,600) for securities and for cash associated with securities accounts. Germany has a coinsurance system that covers 90% of losses up to EUR 20,000. In most of the jurisdictions that provide protection to both depositors and investors, the coverage limit for investors is lower than that for depositors. Conversely, in Quebec (Canada), the coverage for investors – CAD 200,000 (USD 196,000) – is twice that for depositors. As for protection of policyholders, with the exception of Korea, all jurisdictions providing insurance guarantee schemes – Australia, Malaysia, Singapore and the UK – have higher limits for policyholders than for depositors. Australia and Singapore have not set any limits for non-life insurance-related losses, and the UK covers up to 90% of all claimed losses with no upper limit for both non-compulsory life and non-life insurance (and 100% for certain compulsory insurance claims, e.g. third-party motor insurance). On the other hand, Malaysia has the same coverage limit of MYR 500,000 (USD 165,000) for both life and non-life insurance. Singapore's coverage limit for life insurance products is between SGD 100,000 and SGD 500,000 (USD 81,460~407,300), which is 10 times the coverage limit for deposits.

Table 5. Coverage Limits

Jurisdiction	DIS	ICS	IGS-Life	IGS-General
Australia¹	AUD 1 m (USD1.038 m.)	-	-	No limit
Austria	EUR100,000 (USD 129,400)	EUR20,000 (USD 25,900)	-	-
Belgium	EUR100,000 (USD 129,400)	EUR20,000 (USD 25,900)	-	-
Quebec² (Canada)	CAD 100,000 (USD 98,000)	CAD 200,000 (USD 196,000)	-	-
Denmark	EUR100,000 (USD 129,400)	EUR20,000 (USD 25,900)	-	-
France	EUR100,000 (USD 129,400)	EUR70,000 (USD 90,600) for securities + EUR 70,000 for cash associated with securities accounts	-	-
Germany	EUR100,000 (USD 129,400)	90% max EUR20,000 (USD 25,900)	-	-
Greece	EUR100,000 (USD 129,400)	EUR30,000 (USD 38,800)	-	-
Korea	KRW 50 m (USD 45,000)	KRW 50 m (USD 45,000)	KRW 50 m (USD 45,000)	KRW 50 m (USD 45,000)
Liechten - stein	CHF 100,000 (USD 110,000)	CHF 30,000 (USD 33,000)	-	-
Malaysia	MYR 250,000 (USD 82,500)	-	Up to MYR 500,000 (USD165,000)	Up to MYR 500,000 (USD165,000)
Serbia	EUR50,000 (USD 64,700)	EUR20,000 (USD 25,900)	-	-
Singapore	SGD 50,000 (USD 40,730)	-	SGD 100,000 ~500,000 (USD 81,500 ~407,000)	No limit
Sweden	EUR100,000 (USD 129,400)	SEK 250,000 (USD 38,500)	-	-
UK	GBP 85,000 (USD 129,400)	GBP 50,000 (USD 76,100)	90% of claim with no upper limit	90% of claim with no upper limit

Note: 1) Australia: The new coverage limit of AUD 250,000 was adopted on February 1, 2012.

2) Exchange rates for conversion into USD at end-2011.

There is little difference in the scope of coverage for deposits. Most jurisdictions guarantee deposits at deposit-taking institutions such as banks. Consequently, only the scope of coverage related to investment and/or insurance products in each jurisdiction is shown in Table 6. As regards investor compensation, most IPS cover investment products that are related to the trading of securities. The Fonds de Garantie des Dépôts et de Résolution (FGDR) in France protects cash associated with securities accounts as well as the securities themselves. Liechtenstein even covers derivatives including swaps and options. In Korea, cash deposits for the purchase and sale of securities and principal-guaranteed money trusts are insured by the protection scheme. In the UK, investors are also protected against bad advice or mismanagement. As for insurance products, while Australia covers any insurance policy issued by a general insurer, Korea, Malaysia, Singapore and the UK have specific rules regarding the scope of coverage and product eligibility. Meanwhile, Australia reports that it does not protect deposits and insurance policies denominated in foreign currencies.

Table 6. Coverage Scope for Investment and Insurance Products

Jurisdiction	Coverage Scope
Australia	(Insurance) Any insurance policy issued by a general insurer unless denominated in foreign currency
Austria	(Investment) Financial instruments held in custody which cannot be returned to the owner
Quebec (Canada)	(Investment) Products or services that the market intermediary is authorized to offer within the limits of its certificate or registration
France	(Investment) All securities and securities accounts except those of financial institutions and public bodies, cash associated with these accounts
Germany	(Investment) Liabilities arising from securities transactions
Greece	(Investment) Investment services of brokerage and dealing
Korea	(Investment) Cash in customer accounts, principal-guaranteed money trusts, etc. (Insurance) Policies held by individuals, retirement insurance policies, principal-guaranteed money trusts, etc.
Liechtenstein	(Investment) Transferable securities, units in investment undertakings, money market instruments, financial futures contracts, FRAs, swaps, options
Malaysia	(Insurance) Selected benefits insured under insurance policies
Serbia	(Investment) Financial instruments, money accounts in connection with investment services
Singapore	(Insurance) All life products (life), work injury, motor vehicle third party, personal motor/travel/property, and foreign/domestic worker(non-life)
Sweden	(Investment) Any financial instrument or money which the institution handles on behalf of customers in the course of providing investment services
UK	(Investment) Designated Investment Business defined in the FSA Handbook – includes client money and assets, claims for negligent advice or management of investments, etc. (Insurance) Life assurance, pensions, annuities, endowments, (life), employer liability, public liability, motor, household, property, travel, professional indemnity etc. (non-life)

- Note: 1) Australia excludes reinsurance and retrocession policies, insurance policies written by a foreign general insurer, and others from coverage.
- 2) In Malaysia, eligibility is limited to policyholders of Ringgit-denominated Malaysian policies, and the policy must be issued in Malaysia by an MDIC insurer member.
- 3) In the UK, reinsurance, credit, marine and aviation policies are excluded from non-life protection.

3) Funding of the IPS

Sufficient funding is essential for the effectiveness of IPS. Funding methods can be of two main types: ex ante and ex post. Consistent with the findings of the FSB Report on the Thematic Review on Deposit Insurance Systems in 2012,¹⁵ the IPS survey found that more integrated protection agencies like those of Quebec (Canada), Germany, Korea, Malaysia, Serbia, Singapore and Sweden (DIS) raise funds ex ante.¹⁶ Those in Australia, Austria, Liechtenstein and the UK, on the other hand, are funded ex post. However, there has been a shift away from ex post to ex ante funding among European nations following the recent global financial crisis, with France and Greece adopting both ex ante and ex post funding mechanisms. By end-2013, France's FGDR had raised EUR 2.5 billion and EUR 120 million for the deposit insurance fund and the investor compensation scheme, respectively, on an ex ante basis. In 2009, the Hellenic Deposit and Investment Guarantee Fund (HDIGF) of Greece began collecting annual premiums from member institutions to build the investor compensation fund.

Malaysia (DIS and IGS), Germany (ICS), Singapore (DIS and IGS) and Korea (DIS, ICS, and IGS) have adopted a risk-based premium system, as a tool to promote sound risk management and mitigate moral hazard.

¹⁵ Sixteen of the 21 jurisdictions surveyed in FSB (2012) report that they chose an ex ante funding system, while only five chose ex post funding.

¹⁶ In Sweden, the deposit insurance fund is raised ex ante, but the investor compensation scheme is funded ex post.

Table 7. Funding Type and Insurance Premiums

Jurisdiction	Funding Type	Insurance Premium	Assessment Basis
Australia, Austria, Liechtenstein, UK	Ex post	-	
Quebec (Canada)	Ex ante	0.04% (DIS)	Insured deposits
		CAD 100 or 160 (ICS)	Category of services
France¹⁾	Ex ante and ex post	EUR 2,535 m (DIS)	Split among scheme participants
		EUR 120 m (ICS)	
Germany	Ex ante	0.016% (DIS)	Deposits
		1.23%, 2.46%, 3.85% or 7.7% (lower than 10%, ICS)	Gross commission income and of gross earnings on financial transactions
Greece	Ex ante and Ex post	0.3113% (DIS)	Deposits
		0.0758% (ICS)	Value of clients assets
Korea	Ex ante	0.08% (DIS-banks) 0.4% (DIS-MSBs)	Annual average of deposits
		0.15% (ICS)	Annual average of deposits in investors' accounts
		0.15% (IGS)	Arithmetic average of policy reserves and premium income
Malaysia	Ex ante	0.03~0.24% (DIS)	Total insured deposits
		0.025~0.2% (IGS-life) 0.05~0.4% (IGS-non-life)	Actuarial valuation liabilities (life) Net premiums (non-life)
Serbia	Ex ante	0.1% (DIS, quarterly)	Total insured deposits
Singapore	Ex ante	0.02~0.07% (DIS)	Insured deposits
		0.028~0.142% (life) 0.106~0.529 (non-life)	Aggregate protected liabilities (life), gross premiums (non-life)
Sweden	Ex ante (DIS)	0.1% (DIS)	All covered deposits
	Ex post (ICS)	Small annual fees (ICS)	-

Note: 1) France sets global reserve amounts for the DIS and ICS, and these amounts are split among scheme participants to define their contributions.

Source: IADI Survey (2013)

Most integrated protection agencies report that they maintain separate funds for each scheme and, except for Korea and the UK, prohibit cross-subsidization or borrowing between funds. These jurisdictions are Quebec (Canada), Germany, Greece, Malaysia, Serbia and Singapore.^{17,18} France has separate accounts for each fund, and no cross-subsidization or borrowing is allowed. On the other hand, in Korea, the deposit insurance fund has several sector-specific accounts (e.g. banking account, financial investment account, insurance account) that are managed separately, but if necessary one account can borrow from another, or assets and liabilities can be transferred from one account to another.¹⁹ In the case of Liechtenstein, which has adopted an ex post funding system, all premiums and/or other contributions are placed into one account. In the UK, the FSCS manages eight broad funding classes and has some limited borrowing powers between classes, subject to interest being paid by the borrowing class and the funds being repaid in the same financial year.

As shown in Table 8, most of the integrated protection agencies have back-up funding arrangements in place to meet their obligations in case of a shortage of funds. For Australia, the DIS in Quebec (Canada), and Sweden, these agencies – as part of the financial regulator or the government – have emergency credit lines from those bodies. APRA in Australia has a special appropriation of AUD 20 billion from the government. The protection agencies in Quebec (Canada) and Sweden can borrow without limit from the government of Quebec and the Swedish National Debt Office (SNDO), respectively. The FSCS in the UK has put in place syndicated loan arrangements with commercial banks of up to GBP 750 million, while additional back-up funding is also available from the National Loans Fund (part of government). Austria, Korea, Malaysia and Singapore are authorized to borrow from the government. Raising funds from

¹⁷ The Greek government established the Resolution Scheme in 2011, when the global financial crisis was still unresolved. To fund the Scheme, it passed a special law to allow one-time borrowing from the deposit insurance fund.

¹⁸ In Malaysia, there are a total of six funds: Conventional Deposit Insurance Fund, Islamic Deposit Insurance Fund, Family Solidarity Takaful Protection Fund, General Takaful Protection Fund, Life Insurance Protection Fund and General Insurance Protection Fund. These funds are managed separately.

¹⁹ In addition to the cross-borrowing arrangement, if an account has accumulated so many losses that it cannot repay its debts, the Deposit Insurance Committee may decide to reduce/exempt its interest payment burdens or grant a deferral of repayment.

the market is permitted in Austria, France, Germany, Greece, Korea and Malaysia. Charging additional levies on insured financial institutions is permitted in France, Greece, Malaysia and Singapore. Conversely, the investor compensation scheme in Quebec (Canada) and the IPS in Liechtenstein and Serbia have no access to emergency funding.

Table 8. Back-up Funding Arrangements

Jurisdiction	Back-up Financing and Others
Australia	Special appropriation of AUD 20 bn from the government
Austria	Other DIF coverage, borrowing from the market, government guarantee
Quebec (Canada)	Funding from the government of Quebec without limit (DIS) None for ICS
France	Additional levy on member institutions and borrowing from the market
Germany	Extra contributions and borrowing from the market
Greece	Special levy and borrowing from the market
Korea	Borrowing from the government, BOK, and member institutions, DIF bonds and others
Liechtenstein	No arrangements
Malaysia	Borrowing from the government, raising funds from the capital market, ex post levy
Serbia	No arrangements
Singapore	Borrowing from MAS and additional levy
Sweden	Unlimited borrowing from the SNDO
UK	Syndicated loan of up to GBP 750 m from commercial banks and access to the Government National Loans Fund.

Source: IADI Survey (2013)

4) Resolution Powers of the IPS

Table 9 provides a summary of the mandates and resolution powers of each IPS surveyed in this study. Nine of them are payboxes, responsible only for reimbursing depositors in the event of a financial institution failure.²⁰ The Deposit Guarantee and Investor Protection Foundation of the Liechtenstein Bankers Association (DGIPF) and the FSCS in the UK are payboxes with extended powers. The DGIPF in Liechtenstein has very limited powers regarding deposit reimbursement because it only has a system of depositor preference in the event of a financial institution's liquidation. The UK's FSCS is liable not only for reimbursement but also for sharing the resolution costs with the authorities (for resolutions managed by the Bank of England). The FSCS also has the power to seek continuity of cover for policyholders of a failed insurance company by funding a transfer or the issuance of substitute policies. The FGDR in France can, at the request of the resolution authority (ACPR), participate in the restructuring or resolution proceedings as well as reimbursing depositors and investors. The KDIC in Korea and the MDIC in Malaysia, as risk minimizers, have the broadest range of resolution powers. Besides reimbursement, the KDIC has powers over the entire resolution process; these include risk monitoring, asset disposition, recovery of funds through receivership management and conducting investigations against failed financial institutions. The MDIC also has powers for risk monitoring and the resolution of failed member institutions.

²⁰ The Austrian Deposit Guarantee Scheme (ADGS) stated that it has early warning functions.

Table 9. Mandates and Powers of the IPS

Jurisdiction	Type of Mandate	Resolution Authority and Others
Australia	Paybox	APRA
Austria	Paybox	Early warning function (ADGS)
Belgium	Paybox	
Quebec (Canada)	Risk minimizer (DIS) Paybox (ICS)	AMF
Denmark	Paybox	
France	Loss minimizer	ACPR; resolution capacities at the request of ACPR
Germany	Paybox	Bafin
Greece	Paybox	Bank of Greece
Korea	Risk minimizer	FSC and KDIC
Liechtenstein	Paybox with extended powers	Court
Malaysia	Risk minimizer	BNM and MDIC
Serbia	Paybox	MoF and National Bank of Serbia
Singapore	Paybox	MAS
Sweden	Paybox	
UK	Paybox with extended powers for resolution funding; powers for insurance continuity	Bank of England (for banks)

Source: IADI Survey (2013)

III. Policy Considerations for the IPS

1. Background for Adopting an IPS

A growing number of jurisdictions have adopted protection schemes not only for depositors but also for investors and/or policyholders. In some cases, sector-specific schemes are established to protect financial consumers in their respective markets against the risk of losses, but there is an increasing trend for an existing deposit insurer to be given a mandate for the protection of investors or policyholders as well.²¹ This is because, in most jurisdictions, banking is more dominant and critical to financial stability than investment or insurance business. Therefore, deposit insurance is usually established before any protection scheme for investors or policyholders. Moreover, there is no evidence of the reverse, where an investor compensation scheme or insurance guarantee scheme is later mandated to extend protection to depositors.²²

A search of current literature for a theoretical basis for IPS yielded no results. Moreover, nearly all previous analyses to find the theoretical underpinnings of integrated supervisory systems produced similar outcomes. In such studies, the most commonly used approaches to discuss the theoretical basis for integration are: an institutional approach, a functional approach, a regulation-by-objective approach and an integrated approach. Despite many attempts to identify the theoretical basis for each of these approaches, no paper has yet provided a clear answer to this question. Instead, IMF (2006) lists the potential advantages and disadvantages of each approach and recommends jurisdictions to adopt supervisory structures that fit the jurisdiction-specific circumstances.²³ As regards the integration of financial consumer protection schemes, it would be advisable, too, to compare the benefits and limitations of the multiple agency model versus an integrated single agency model, and

²¹ More recent cases include Malaysia, Singapore and Serbia.

²² In the UK, the FSCS was established through the consolidation of pre-existing schemes for depositors, insurance policyholders and investors.

²³ IMF (2006) suggests that the reasons for integrated supervision are: i) conglomeration of financial systems and the rise of complex conglomerates, ii) smaller size of the overall economy, iii) recent financial sector crisis, and iv) legal factors.

choose a system that is most appropriate for the unique jurisdiction requirements.

The rest of this section focuses on the background for adopting an IPS in the jurisdictions surveyed in this study. A good example of a jurisdiction that has decided to integrate financial consumer protection in response to a financial crisis is Australia. To tackle the recent global financial crisis, the Australian government decided that the financial regulator, APRA, should provide an explicit guarantee of up to AUD 1 million for depositors and the full amount of benefits for general policyholders starting October 2008. The Korean government, too, decided to integrate sectoral protection schemes into the KDIC in April 1998 because of the 1997 Asian financial crisis. For the purposes of this study, Korea's IPS came about as part of financial supervisory reform.

The second group of jurisdictions with IPS is EU member states. Member states are obligated to implement directives at EU level. Complying with the EU Directive on Deposit Guarantee Schemes of 1994 and the Investor Compensation Schemes Directive of 1997, EU members began adopting IPS. The responsibility for investor compensation schemes was given to existing deposit insurers instead of creating a new agency (Oxera, 2005). Denmark and Germany (since 1998), Austria, Belgium, France and Sweden (since 1999) and Luxembourg (since 2000) provide protection for both investors and depositors.²⁴ In Greece, the Athens Stock Exchange Members' Guarantee Fund (ASEMGF) has been responsible for investor compensation since 1997. Yet, among banks which are members of the deposit insurer (HDIGF) but not of the ASEMGF, 12 institutions offering covered investment services were allowed to join the HDIGF's Investment Cover Scheme in 2009. This transformed the HDIGF into an IPS. Today, the responsibility for investor compensation is shared between the ASEMGF and the HDIGF.

The third group includes jurisdictions like Korea, the UK and Quebec

²⁴ In its survey response, France stated that it has a plan to broaden its protection scheme by adding protection for life insurance policyholders because the three sectors – bank deposits, financial investment and life insurance – share closely related business environments and are regulated by the same supervisory authority, the ACPR.

(Canada), which integrated their protection schemes along with a reform of their financial supervisory and regulatory regimes. In the case of Korea, the KDIC only insured bank depositors when it was established in 1996. When financial supervision was integrated in April 1998, the KDIC was also transformed into an integrated agency for financial consumer services, taking over the Securities Investors Protection Fund, the Insurance Guarantee Fund, the Credit Unions Safety Fund and other sector-specific protection funds. The decision to reorganize the financial safety net was spurred by the Asian financial crisis that hit most of Asia in October 1997. During the 1997 crisis, a large number of financial institutions started to fail, including banks, securities dealers, insurance companies, credit unions and savings banks. In response, the Korean government decided to adopt integrated systems for both financial supervision and consumer protection and resolution, in order to increase the efficiency of supervision and failure resolution. After the reorganization, the Korean government injected public funds into the financial system and made concerted efforts to resolve failed financial institutions, which led to a successful restructuring of the financial industry and the stabilization of the financial system.

In the UK, with the rising trend of financial conglomeration in the 1990s, Parliament enacted the Financial Services and Markets Act in June 2000 and established the FSA (which was later split into the PRA and the FCA in April 2013) as an integrated financial regulator. At the same time, the FSCS was established as an integrated agency for financial consumer protection to administer the eight pre-existing sectoral protection schemes such as the Deposit Protection Board, Investors Compensation Scheme and the Policyholders Protection Board. A single Financial Ombudsman Service was also established at the same time.

In Quebec (Canada), the AMF was created as an integrated financial supervisory authority in 2004, and is mandated to protect depositors and investors while fulfilling its supervisory responsibility. Before the establishment of the AMF, depositors and investors were protected by separate schemes. The decision to integrate financial supervision and consumer protection, according to the AMF, was due to a combination of factors, including: simplifying organizational structures, creating more synergy, effective crisis response,

following more closely new developments in international guidance and regulations, and reducing the gap between supervision and consumer protection.

The fourth group includes jurisdictions where the deposit insurer took over responsibilities for financial consumer protection from the central bank or the financial supervisory authority. In Malaysia and Singapore, the responsibilities for policyholder protection were transferred from the central bank (BNM) and the financial regulatory authority (MAS) to the MDIC and the SDIC, respectively. In 1996, the BNM set up the Insurance Guarantee Scheme Fund to compensate policyholders in the event of an insurance company failure. With the transfer of responsibilities, the Fund was transferred to the MDIC in 2011. The SDIC also took over the Policy Owners' Protection Scheme, which had been under the MAS's administration until May 2011, in order to increase cost efficiency and make better use of the SDIC's resources.

Lastly, in Serbia, following the revision of the Law on the Capital Market in 2011, the DIA was recently given the responsibility to protect investors. For that purpose, the DIA manages the Investor Protection Fund under the supervision of the Securities Commission of the Republic of Serbia.

2. Pros and Cons of Adopting an IPS

In this section, the advantages and disadvantages of IPS compared to sectoral protection schemes are discussed. The most immediate benefits of an IPS are: i) greater efficiency of operations; ii) greater consumer awareness of protection schemes; iii) smooth coordination of policies; iv) better crisis prevention and response capabilities; and v) cost efficiency through economies of scale and scope.

First, an integrated protection agency may have greater operational efficiency over multiple agencies, because the experience and knowledge of dealing with different financial sectors can be shared among staff within a single organization. By working in different departments in an integrated protection agency, staff members can gain practical experience across insured sectors,

build expertise, share that knowledge with one another, and develop and share best practices. Furthermore, the bankruptcy of a given institution may result in recourse to two or more guarantees (e.g. the deposit insurance scheme and the investor compensation scheme if a bank that also provides investment services fails). Managing these various guarantees within the same IPS helps to offer clients an efficient payout.

Second, having an IPS may help to raise awareness of the protection scheme among consumers of various financial products, and enhance their confidence in the financial system.²⁵ Consumers do not need to be aware of more than one guarantee scheme and can deal with one entity in the event of failures. In integrated markets, this removes the possible confusion as to which scheme responds to claims.

Third, many of the jurisdictions where protection schemes are integrated also have an integrated or cross-sectoral supervisor. This makes it easier for the regulator and the protection agency to coordinate. When there are multiple supervisors and multiple protection agencies, there is greater potential for turf wars instead of trying to decide on a policy for the industry as a whole or at national level, which can lead to inefficient decisions. On the other hand, a unified supervisor and an integrated protection agency may find it easier to cooperate and coordinate since they each have clearly defined mandates and authorities specified in law or regulation.

The fourth advantage of an IPS is that it is better positioned to monitor risk levels at member institutions and effectively handle financial institution failures. In particular, in the event of a failure of a financial conglomerate, an integrated protection agency is more capable of handling the failure on its own than sectoral schemes.²⁶ As well as being better able to coordinate responses to

²⁵ In its survey response, France's FGDR stated that an integrated protection agency increases financial consumers' understanding of the protection scheme and provides better visibility. Greece said that the main advantage of an IPS is enhanced public confidence through the expansion of the financial safety net.

²⁶ As regards the benefits of an IPS, Quebec (Canada) mentioned that it has knowledge and experience of different schemes within a single organization, enables information

consumers with different or multiple claims thanks to a one-stop service, it can act as the single protection scheme with the insolvency practitioner – both in managing the estate and in pursuing the recoveries claims.

A further advantage of an IPS is that it can achieve cost efficiency through economies of scale and scope. The cost reductions come from eliminating duplicated functions and infrastructure.

Meanwhile, the drawbacks of an integrated protection scheme can include: i) governance issues related to decision-making at Board level among board members appointed from various sectoral backgrounds; ii) the risk of cross-subsidization and unequal treatment between different sectors if one particular sector continues to have problems and is not segregated (Korea); iii) a sector-specific scheme may sell (or transfer) the assets of a failed institution more rapidly because it has better knowledge of potential buyers in the industry (Quebec (Canada)); and iv) an integrated scheme may have a predominant consumer protection focus, and as such may become detached from the industry.

In practice, it is thought that these potential disadvantages can be adequately addressed if the IPS is well designed and properly managed. In answer to a question regarding any problems encountered during the implementation of an IPS such as legal issues or strain on human resources, all respondents reported that there was little difficulty in handling these issues, regardless of whether they merged existing schemes (Korea and the UK) or added a new scheme to the deposit insurer (Malaysia and Singapore).

3. Design Features for Consideration in Adopting an IPS

Like sector-by-sector schemes, an IPS has the public policy objectives of protecting financial consumers from financial institution failures and enhancing

sharing between schemes and can harmonize/coordinate laws and policies across insured sectors.

public confidence in the financial system, thereby ensuring financial stability. To this end, the protection scheme should be designed in a way that fits the jurisdiction's financial environment. In particular, system design appears to be more complicated for IPS than for sectoral protection schemes. This section explores the features to be considered when designing an IPS based on the Core Principles and jurisdiction cases described above.

Unlike sector-by-sector schemes, an IPS requires a system design that addresses sector specifications. Since each sector of the financial industry, for example banking, securities and insurance, has unique characteristics, the design of an IPS must take into account these unique characteristics and at the same time ensure equity in the level of protection provided to the financial consumers of the respective sectors. The plan to implement an IPS should gather enough support from industry stakeholders in advance as well as have in place a comprehensive implementation plan which is ready to be put into action immediately, if necessary.

First, to be able to contribute to consumer protection and financial stability, an IPS must have operational independence. When financial consumer protection functions are assigned to a supervisory authority or one of the government agencies, there exists a potential conflict of interest between the mandates of consumer protection and prudential supervision, as well as a risk of regulatory forbearance. Also, there is a concern that consumer protection may not get sufficient attention from the supervisors, and that financial regulators often do not have in place processes to oversee financial consumer protection effectively. It is for these reasons that many of the jurisdictions adopting consumer protection schemes have decided to make them operationally independent agencies.

In addition, a clear mandate is required, for which the integrated scheme is accountable. Also, the governance structure should be commensurate with the mandate and the nature of the business of its members in each financial sector to ensure the effectiveness of operations. This is because only when the Board of Directors has sufficient expertise and authority, can a "right" system be put in

place that provides similar treatment across different sectors and promotes fair competition and industry development.

Second, the limit and scope of coverage should consider the characteristics of each financial sector. For deposits, the protection limit should be high enough to protect a large majority but low enough to impose market discipline and curb moral hazard. The protection limit should be set at a level which ensures that not only are all small depositors, investors and/or policyholders protected, but also that only a certain percentage of the total value of deposits, investments and/or type of policies is covered. Insurance losses may need to be treated differently, as the possible losses can far exceed the consumers' costs. For this purpose, basic data on the number of financial consumers and their accounts, the total value and type of deposits, investment and insurance products, and the average account balance or claim/loss in each sector should be prepared and analyzed before decisions on coverage limits are made. The responses to the IPS survey indicate that all jurisdictions with IPS except Korea apply different coverage limits to different financial sector consumers.²⁷ In most cases, the limit for investors is lower than the limits for depositors and policyholders. In particular, Australia and Singapore do not have any limit on guarantees for non-life insurance policyholders, while the UK has no limit for both life and non-life policyholders.

The scope of coverage should not result in arbitrage between sectors or hamper their development. Determining the eligibility for protection would not be difficult for deposit products, but there may be differing views on the eligibility of certain types of investment products and insurance policies.

Third, a plan to secure funding for the integrated protection scheme, including back-up funding in emergency situations, should be developed. Recently, the trend is to raise funds ex ante. When setting the premiums to be

²⁷ Korea has a uniform coverage limit of KRW 50 million (USD 45,000) for all financial sectors. After providing temporary blanket coverage after the 1997 Asian financial crisis, Korea returned to a limited coverage system in 2001. At the time of the transition, the coverage limit was set at the current level because it was the highest of the limits offered by sectoral protection schemes before the integration of protection schemes.

levied on member institutions, consideration should be given to an appropriate premium base, rates, potential liabilities and target fund size. There is also a need to manage the reserves for different sectors separately. With the exception of Korea and the UK, none of the IPS surveyed allow for cross-subsidization, although cross-subsidization or cross-borrowing may be considered in the context of raising emergency finance to address liquidity shortfalls when handling problems in one particular sector. In case the reserves are insufficient, back-up funding must be provided. Money can be borrowed from the government. However, using taxpayers' money to resolve financial institution failures and protect financial consumers is generally the last recourse. Therefore, many IPS are permitted to borrow from the market or charge special levies from member institutions to cover liquidity shortfalls. Meanwhile, Quebec (Canada) and the SNDO in Sweden have an unlimited government borrowing facility which can be tapped if there is a shortage of funds to handle financial institution failures.

Fourth, another aspect worth considering is the role of an integrated protection agency as a resolution authority. Often, IPS act as payboxes responsible for compensation only. However, in Korea and Malaysia, they are given a resolution authority mandate with a wide range of failure resolution powers.²⁸ The protection agencies in the UK and France, on the other hand, have only a limited role in the resolution framework. In order to build an effective resolution regime, special consideration should be given at the designing stage to the mandates and powers of the IPS for failure resolution, the supporting legislative framework and the relationships among the safety net partners. The more powers and responsibilities it has, the more human and financial resources it will need.²⁹

²⁸ The KDIC of Korea was given resolution powers to contain the 1997 Asian financial crisis and mandated to be a risk minimizer.

²⁹ Quebec (Canada) argued that an integrated protection agency should have adequate and sufficient resources (human and material), recruit and retain people with appropriate expertise, review different legislations that need to be harmonized, secure adequate funding (ex ante) and back-up funding, and be part of a financial safety net council.

IV. Conclusion

Following the recent global financial crisis, there has been a trend toward expanding financial consumer protection schemes in an integrated manner, such that a pre-existing single deposit insurance agency adds or provides a guarantee or protection to investors and/or insurance policyholders. The purpose of this paper is to examine the current state of IPS around the world, analyze scheme characteristics, and provide policy considerations for jurisdictions adopting an IPS.

Based on the literature review and a survey questionnaire to IADI and EFDI members, 17 out of a total of 61 jurisdictions studied in this paper have an IPS. Those 17 IPS were then analyzed with regard to the relationship with the financial supervisory authority, the limit and scope of coverage, funding mechanisms, and resolution powers. In addition, this paper discusses some possible advantages of an IPS, such as greater operational efficiency from economies of scale and scope, better coordination with the industry and financial safety net participants, specialized skills, and improved crisis response capabilities.

Finally, a set of design features to consider when adopting an IPS, based mostly on the Core Principles, are presented. There are also some suggestions for designing an effective IPS. First, an IPS must have operational independence. Second, the limit and scope of coverage should consider the characteristics of each financial sector. Third, a funding mechanism for the IPS should be prepared, including back-up funding in emergencies. Fourth, establishing an effective resolution regime alongside an IPS should be considered. Since each jurisdiction has unique economic and financial environments, designing and implementing an IPS must take into account such jurisdictional and industry specifics.

Due to limited data and insufficient literature, this study can only provide an overview and describe some design features of IPS. More detailed theoretical and empirical analysis of IPS remains for future research.

References

BCBS and IADI, Core Principles for Effective Deposit Insurance Systems, Basel, June 2009.

BCBS and IADI, Core Principles for Effective Deposit Insurance Systems – Methodology for Compliance Assessment, Basel, December 2010.

Bernet, Beat and Susanna Walter, Design, Structure and Implementation of a Modern Deposit Insurance Scheme, SUERF Studies: 2009/5, Vienna, 2009.

FSB, Thematic Review on Deposit Insurance Systems, Peer Review Report, Basel, January 2012.

HM Treasury, A framework for Guarantee Schemes in the EU: A discussion paper, London, October 2005.

IADI, Enhanced Guidance for Effective Deposit Insurance Systems: Mitigating Moral Hazard, Basel, May 2013.

IADI, Survey Questionnaire on the Integrated Protection Schemes, Basel, March 2013.

IADI, Enhanced Guidance for Effective Deposit Insurance Systems: Deposit Insurance Coverage, Basel, March 2013.

IADI, Discussion Paper on Cross Border Deposit Insurance Issues Raised by the Global Financial Crisis, Basel, July 2010.

IADI, Funding of Deposit Insurance Systems, Guidance Paper, Basel, 2009.

IADI, General Guidance for an Effective Deposit Insurance Mandate, Basel, 2007.

IADI, General Guidance to Promote Effective Interrelationships among Financial Safety Net Participants, Basel, January 2006.

IAIS, Issues Paper on Policyholder Protection Schemes, Basel, October 2013.

IMF, Is One Watchdog Better Than Three? International Experience with Integrated Financial Sector Supervision, Working Paper/06/57, March 2006.

Korea Deposit Insurance Corporation, Financial Consumer Protection Schemes: Overview and Its Implications (in Korean), Seoul, 2006.

OECD, Analysis of Policyholder Protection Schemes and Some Cross-sectoral Considerations, Committee on Financial Markets, April 2011.

Oxera, Description and Assessment of the National Investor Compensation Schemes Established in Accordance with Directive 97/9/EC, Consultation Paper for European Commission, January 2005.

Oxera, Insurance Guarantee Schemes in the EU, Consultation Paper for European Commission, November 2007.

Schich, Sebastian and Byoung-Hwan Kim, Guarantee Arrangements for Financial Promises: How Widely Should the Safety Net be Cast?, Financial Market trends, OECD, 2011.

Appendix 1

Jurisdictions Responding to the Questionnaire

1	Albania	26	Malaysia
2	Australia	27	Mexico
3	Austria	28	Nicaragua
4	Azerbaijan	29	Norway
5	Bangladesh	30	Poland
6	Brazil	31	Romania
7	Brunei	32	Russia
8	Bulgaria	33	Serbia
9	Canada-CDIC	34	Singapore
10	Canada-Quebec	35	Slovenia
11	Colombia	36	Sweden
12	Czech Republic	37	Swiss
13	Finland	38	Taiwan
14	France	39	Thailand
15	Germany	40	Turkey
16	Greece	41	Uganda
17	Hong Kong	42	UK
18	Hungary	43	Ukraine
19	India	44	Uruguay
20	Italy	45	USA
21	Jamaica	46	Venezuela
22	Japan	47	Zimbabwe
23	Kazakhstan	48	Germany (BVR)
24	Korea	49	Romania (ICF)
25	Liechtenstein		

Appendix 2

Legal Framework

Jurisdiction	Agency	Governing Law
Australia	Australian Prudential Regulation Authority (APRA): 1998	Banking Act 1959/Insurance Act 1973/ Financial System Legislation Amendment (Financial Claims Scheme and Other Measures) Act 2008/APRA Act 1998
Austria	Einlagensicherung der Banken & Bankiers GmbH (ADGS): 1989	Austrian Banking Act
Belgium	Deposit and Financial Instrument Protection Fund (DFIPF): 1999	
Denmark	Danish Guarantee Fund for Depositors and Investors (GFDI): 1998	Act No. 415 of Guarantee Fund for Depositors and Investors
Quebec (Canada)	Autorité des marchés financiers (AMF): 2004	AMF Act/Deposit Insurance Act/ Distribution of Financial Products and Services Act
France	Fonds de Garantie des Dépôts et de Résolution (FGDR): 1999	European Directives/national laws
Germany	Entschädigungseinrichtung deutscher Banken (EdB): 1998	Deposit Guarantee and Investor Compensation Act (EAEG)
Greece	Hellenic Deposit and Investment Guarantee Fund (HDIGF): 1995	Greek Law 3746/2009/Greek Law 4051/2012
Korea	Korea Deposit Insurance Corporation (KDIC): 1996/1998	Depositor Protection Act
Liechtenstein	Deposit Guarantee and Investor Protection Foundation of the Liechtenstein Bankers Association	Art.7 Banking Act/Art.18 to 18k Banking Ordinance/Articles of the foundation
Luxembourg	Deposit Guarantee Association Luxembourg(AGDL): 2000	Law on the Financial Services Sector in Luxembourg 1993
Malaysia	Malaysia Deposit Insurance Corporation (MDIC): 2005/2011	MDIC Act
Serbia	Deposit Insurance Agency of Serbia (DIAS): 1989/2012	Law on DI Agency/Law on DI/Law on Bankruptcy and Liquidation of Banks and Insurance Companies/Law on Banks/ Capital Market Law (Article 134~146)
Singapore	Singapore Deposit Insurance Corporation (SDIC): 2005/2011	Deposit Insurance and Policy Owners' Protection Schemes Act (DI-PPF Act)
Sweden	Swedish National Debt Office (SNDO): 1789	Deposit Insurance Act / Investor Compensation Act/EU Directives
UK.	Financial Services and Compensation Scheme (FSCS): 2001	Financial Markets and Services Act

Source :IADI Survey (2013)

Number of Insured Institutions

Jurisdiction	DIS	ICS	IGS-Life	IGS-General
Australia	170	-	-	127
Austria	82	82	-	-
Belgium	48	44		
Quebec (Canada)	421	42,720	-	-
Denmark	121			
France	625	393	-	-
Germany	219	780	120	-
Greece	37	12	-	-
Korea	162	118	23	21
Liechtenstein	16	16	-	-
Malaysia	43	-	26	35
Serbia	32	55	-	-
Singapore	34	-	18	39
Sweden	146	251	-	-
UK	802	8,134	7,004	12,975

Note: 1) Germany: 200 commercial banks and 19 public banks in DIS

2) Belgium :www.protectionfund.be.

3)Quebec (Canada): 42,720 insured institutions, including financial planners, mutual funds dealers, life insurer representatives, property and casualty insurer representatives, and scholarship plan dealers.

4) Denmark: Venshoj (2012), "The Financial Crisis & the Danish Banking Sector" p.1.

5)UK: ICS (investment fund management 1,086, investment intermediation 7,048), IGS-life (life & pension provision 330, life & pension intermediation 6,674), IGS-general (general insurance provision 677, general insurance intermediation 12,298).

Financial Supervisory Agency and Relationship

Jurisdiction	Supervisory Agency	Relationship
Australia	APRA	
Austria	Finanzmarktaufsicht (FMA)	Delegating some supervisory activities to Austrian National Bank
Belgium	Commission for the Banking, Finance and Insurance Sector (CBFA)	CBFA attends the meetings of the board of directors without voting rights
Denmark	Financial Supervisory Authority (FSA)	Supervising the Fund
Quebec (Canada)	AMF	Integrated with DI and ICS
France	Autorité de Contrôle Prudentiel et de Résolution (ACPR)	Autorité des Marchés Financiers (AMF) for financial market supervision
Germany	Bafin	Integrated supervisor for banks, security firms and insurance companies
Greece	Bank of Greece for credit institutions	Hellenic Capital Market Commission (HCMC) for financial services companies and ASE for listed companies
Korea	Financial Services Commission (FSC)/Financial Supervisory Service (FSS)	Members of highest decision-making bodies/information sharing and joint examinations
Liechtenstein	Financial Market Authority (FMA)	
Luxembourg	Commission for the Supervision of the Financial Sector	
Malaysia	BNM(CB of Malaysia)	Strategic Alliance Agreement between BNM and MDIC
Serbia	National Bank of Serbia for banks Securities Commission of the Republic of Serbia for security firms	MOU between NBS and DIA
Singapore	Monetary Authority of Singapore (MAS)	
Sweden	Swedish Financial Supervisory Authority (Finansinspektionen)	
UK	Prudential Regulatory Authority (PRA) and Financial Conduct Authority (FCA)	PRA for deposit firms and insurance companies and FCA for all other financial services companies

Note: 1) France, Insurance and mutual Societies Supervisory Authority (ACAM).

Source :IADI Survey (2013)

Type of Financial Supervisory Agency

Single Prudential Supervisor for the Financial System (year of establishment)	Agency Supervising Two Types of FIs			Multiple Sectoral Supervisors (at least one for banks, one for securities firms, and one for insurers)		
	Banks and securities	Banks and insurers	Securities and insurers			
Australia(1998) Austria(2002) Bahrain * (2002) Belgium(2004) Bermuda * (2002) Cayman Islands * (1997) Denmark(1988) Estonia(1990) Germany(2002) Gibraltar(1989) Guernsey(1988)) Hungary(2000) Iceland(1988) Ireland * (2002) Japan(2001) Kazakhstan * (1998)	Korea, Rep.(1997) Latvia(1998) Maldives * (1998) Malta * (2002) Netherlands * (2004) Nicaragua * (1999) Norway(1986) Singapore * (1984) South Africa * (1990) Sweden(1991) United Arab Emirates * (2000) United Kingdom(1997) Uruguay(1993)	Finland Luxembourg Mexico Switzerland Uruguay	Canada Colombia Ecuador EI Salvador Guatemala Malaysia * Peru Venezuela, Rep. Bolivariana de	Bolivia Bulgaria * Chile Jamaica * Mauritius * Slovak Republic * Ukraine *	Albania * Argentina * Bahamas, The * Barbados * Botswana * Brazil * China Croatia * Cyprus * Czech Republic Dominican Rep * Egypt * France * Greece * Hong Kong * India * Indonesia * Israel *	Italy * Jordan * Lithuania * New Zealand * Panama Philippines * Poland * Portugal * Russia * Slovenia * Sri Lanka * Spain * Thailand * Tunisia * Turkey Uganda * United States *
33	6	11	9	41		

Source: IMF (2006)