

Adopting Basel II – Policy Responses in Case of Thailand

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Abstract

This article discusses Thailand's policy responses to adopting **Basel II** from the viewpoint of the **Bank of Thailand (BOT)**, which regulates and oversees the country's banks and banking system. As adoption proved foregone a conclusion, the policy discussion focuses on the *economic issues* and *institutional challenges* associated with how the BOT is to implement Basel II within the context of our developing economy and nascent financial system. The economic issues here refer to the *procyclicality effect* of Basel II vis-à-vis the real-sector economy and the impact of Basel II on banking-sector *competitive landscape*. The institutional challenges here refer to the BOT's own *institutional capacity*, i.e. the *capability* internally and the *credibility* externally to engender and enforce Basel II effectively amongst the supervised banks.

1. Introduction

As is widely understood, the architects of **Basel II**, the **New Capital Accord** on risk-based supervision of capital adequacy for financial institutions, firstly set out to accomplish two interrelated main objectives: (1) to lessen the regulatory arbitrage opportunities exploited since the advent of **Basel I**, the original **Basel Capital Accord**, as well as (2) to recognise, accommodate, and differentially reward advanced **G10**-based banks that purportedly have been making substantial investments in improving internal risk management techniques and practices largely on their own accord.

Indeed when it comes to adopting any international framework affecting institutional governance, discussing policy responses should begin with asking *whether*, and then *when*, the framework should be adopted, if at all. Nevertheless, Thailand, alongside many non-G10 economies, is *already* committed to and advancing swiftly toward Basel II, with our implementation date set to the end of 2008, this despite the fact that the entire framework was, at least initially, an exclusively G10 endeavour. This article discusses Thailand's policy responses to the adoption of Basel II, addressing economic issues and institutional challenges (i) within the context of our developing economy and nascent financial system and (ii) from the point of view of the **Bank of Thailand (BOT)** in her capacity as the policymaker, regulator and supervisor of the country's banks and banking system.

While details regarding the *implementation scope* and *introduction timeline* need not concern us here, it is worth underscoring that for Thailand, Basel II has to be seen in the present context as one amongst an ensemble of policy initiatives aimed at putting a rehabilitated post-crisis financial system on firm grounds *prudentially*, *efficiency*-wise, and with respect to *good governance*. Concurrent with Basel II, and similarly pursuance of close cooperative efforts with the supervised banks, are policy initiatives in such areas as Financial-Sector Master Plan, Consolidated Supervision, Market Value Accounting [14], etc.

In particular, Financial-Sector Master Plan refers to BOT's recent landscaping initiative. For our immediate purpose let's (over) simplify by saying that this policy programme began with recognising that the early 90's proliferation of non-deposit *finance companies*—cursed with insufficient oversights and poor, oft downright fraudulent, governances—contributed to the 1997 crisis (and so this *form* of financial intermediaries should be phased out), and now is bringing about a two-tier banking system: *commercial banks* with universal banking wherewithal and advanced risk management regime on the one hand, *retail banks* with traditional banking and SME focus on the other.

Correspondingly, our scope of Basel II implementation has been defined for both tiers of application (Table 1). Timing wise, our Basel II introduction lags that of the European Union by two years across the board (Table 2), taking into account abovementioned policy initiatives concurrently pursued.

Basel II Approaches for Credit Risk	Commercial Banks	Retail Banks
- Simplified Standardised Approach (SSA)	No	Yes
- Standardised Approach (SA)	Yes	Yes
- Foundation Internal Ratings-Based (FIRB)	Yes	Yes
- Advanced Internal Ratings-Based (AIRB)	Yes	Yes
Basel II Approaches for Operational Risk	Commercial Banks	Retail Banks
- Basic Indicator Approach (BIA)	Yes*	Yes
- Standardised Approach (SA)	Yes	Yes
- Advanced Measurement Approach (AMA)**	No	No
* For operational risk, BIA is only the option for commercial banks pursuing SA for credit risk. ** The BOT is in the process of reviewing our policy stance with respect to the AMA option.		

Table 1: Basel II Implementation Scope for Thailand

Basel II Approaches	End 2007	End 2008	End 2009	End 2010
Credit Risk: SSA/SA	Parallel Run	Yes	Yes	Yes
Credit Risk: FIRB	Parallel Run	$\geq$ 95%BaselII	$\geq$ 90%BaselII	$\geq$ 80%BaselII
Credit Risk: AIRB	Parallel Run	Parallel Run	$\geq$ 90%BaselII	$\geq$ 80%BaselII
Operational Risk: BIA/SA	Parallel Run	Yes	Yes	Yes

Table 2: Basel II Introduction Timeline for Thailand

With the *if-and-when* questions settled, policy discussion then turns to *secondary* considerations concerning partial adoption, framework modifications and/or re-parameterisation to suit local conditions. Here it turns out that there is little room to manoeuvre. First of all, Basel I is an all-or-nothing proposition: no partial credits for partial adoption. As for modification and re-parameterisation, theoretically this is possible, but for all intents and purposes unachievable in practice.ⁱ What flexibility there is comes in the form of **Pillar 1 national discretions**. And indeed the BOT, in a series of ongoing dialogues with supervise institutions, has laboured much over these fine points, for these are the residual *policy-oriented decisions*. In some sense, the extent of our capital adequacy policymaking thus reduces to an exercise in parametric specification.ⁱⁱ

Turning the focus then to *how*, the preparation steps involved in the Basel II **roll-out programme**, we come to the BOT's past and ongoing *policy-support actions*. They include engaging in consultative dialogues with supervised entities, conducting joint quantitative impacts and stress testing exercises, coordinating with other agencies in order to enhance the requisite data, legal, and technical infrastructures, raising general public awareness, and so on.

The central thrust of this article, however, is that key policy responses to the adoption of Basel II in Thailand now revolve around the following two sets of questions

1. Will Basel II produce downside consequences and/or undesirable side effects elsewhere in the system? How will these negative aspects effect **prudential stability** overall and how will they affect BOT's other, **non-prudential mandates**? Are these preventable or are they elemental to the framework? Can they be at all mitigated through reasonable, practical means? Are there policy-oriented countermeasures? Which institutional actors should carry them out, by which mandate and under what modality?
2. As the national authority responsible for the whole of Basel II in Thailand, will the BOT have the institutional capacity, i.e. in terms of legislative authority, human resources, knowledge base, intellectual leadership, and so on, to meet the challenges concomitant with the implementation of Basel II? Does the BOT have the collective *wherewithal* to engender and enforce Basel II effectively amongst the supervised banks? What further capacity enhancement programmes could and should be pursued?

In terms of Basel II producing Basel II producing downside consequences and/or undesirable side effects elsewhere in the system, Section 2 explores the so-called **procyclicality effect** of Basel II vis-à-vis the real-sector economy as well as possible impacts of Basel II on banking-sector **competitive landscape**; these *issues* are considered to be *economic* in nature.

In terms of whether the BOT will command the full extent of legislative authority, human resources, knowledge base, intellectual leadership, and so on, Section 3 addresses the BOT's **institutional capacity**, i.e. the *capability* internally and the *credibility* externally to engender and enforce Basel II; these *challenges* are considered to be *institutional* in nature.

2. Economic Issues

2.1 Procyclicality

Financial system procyclicality is where **regulatory frameworks** as well as **agent behaviours** are firstly *driven by* and in turn *exacerbates* the already **cyclical movements** vis-à-vis the real-sector economy.ⁱⁱⁱ With the advent of Basel II, policymakers and academics rightly agonize over the *procyclical corollary* of a capital regime with substantially *enhanced*

risk sensitivity [8][12][13][16][22]. By and large we are talking about the **credit risk** component of Basel II, although there are some, albeit limited, evidence on procyclicality with respect to **operational risk** and **market risk** [2].

To be sure, it is not the case that credit-driven procyclicality *originates* with Basel II. Rather, both the SA and IRB approaches to measuring credit risk rely on methodologies that have been implicated compellingly in procyclicality research. SA relies on external **credit rating agencies**, which despite the so-called **Through-The-Cycle (TTC)** contention are probably no better at *cycle-proofing* their qualitative judgements [4] than any other group of economic agents. As for IRB approaches, they come in three alternatives. First, IRB banks can rely on their own **loss experiences**. It is difficult to imagine such an approach pursued by any banks operating in Thailand. It is not only that banks in our jurisdictions are outright deficient at collecting historical data; Thailand has had very limited experiences with economic cycles in the sense experienced by the advanced economies. Second, IRB banks can use some kind of **mapping methodology** to match internal credit scores to external credit ratings, which takes us back to the same issues faced by SA banks. Finally, IRB banks can also construct bespoke **credit risk models**.

Generally credit risk models come in three flavours. First, there are those built upon information contained in the credit ratings **transition probability matrix**, which again does nothing to allay concerns over rating agencies' failure to develop full TTC vision. Second, there are those based on Merton's **Asset Value Model (AVM)** [18], including commercially available applications, whose principal driving factor, the **asset value process**, itself often proxied by **equity price time-series**, is very cycle sensitive [9]. Finally, there are credit risk models that are built upon **default intensity**, using technology imported from the actuarial sciences. There it turns out that in order for the so-called **default rate term structure** to be realistic, the default intensity *parameter* should be made *non-homogeneous*, i.e. time varying. And cycle proofing time-varying default intensity might prove hazardous in practice. In fact, not only could intensity-based models be cyclical, they can be used to *detect* cyclical variation in default probabilities [11]. In short, any credit risk *measurement methodology* consistent with Basel II will be cyclical.^{iv}

Notice that this is subtly but definitely different from saying that the Basel II *capital regime* will necessarily create or worsen any procyclicality tendency. In fact, one could distance the *cyclical input* problem several steps from the procyclical capital regime problem [21]. Indeed, for advanced G10 banks, where risk management practice supposedly leads regulatory framework—recall that Basel II aims at bringing capital adequacy regulation “up to speed”—one could argue that Basel II is not making the financial system or the overall economy any more procyclical than they already were. After all, banks' **provisioning behaviour** is known to be procyclical [7], and banks do suffer from a lack of memory (of past crises), as encapsulated by the so-called **Institutional Memory Hypothesis** [5]. At any rate, one could maintain that procyclicality enters because **economic capital (EC)** is cyclical, and

the fact that *regulatory capital (RC)* happens to be cyclical as well is redundant. Advanced G10 banks are supposed to conduct their risk business on basis of EC measures, and not be RC-driven.

However, in the case of non-G10 banking systems—where indeed some regulators pin their hope on Basel II as a vehicle by which better risk management techniques and practices could be engendered among the “technologically-regressive” banks—procyclicality will prove to be largely an *innovated problem*. Hitherto, our financial system, for example, has not been as dependent on the words put out by external credit rating agencies. Still, we saw from the 1997 crisis how these agencies reacted late, even lagged the market judgement. But when they caught up, the resulting *resonance* sent the market tumbling much further. What could be more procyclical than a signal that warns *after the fact* but is then *heeded anew*? With Basel II, the intellectual and informational influence of credit rating agencies will only increase, along with the use of similarly *procyclicality-inducing* credit risk models mentioned above.

To make matters worse, there is an added *systemic risk* dimension to all this. Because credit rating and credit risk modelling technologies *all* rely to varying extent on *systematic factors* as input, Basel II will heighten the awareness of, or *overreaction to*, the existence of such latent factors affecting the fundamentals of all banks, whence failure of one bank immediately conveys adverse information on the surviving banks to the *customarily unforgiving* financial markets [1]. The subtle but crucial point here is how uncertainty regarding *systematic* factor, especially by virtue of the global markets’ relative unfamiliarity with non-G10 banks, has the potential of turning an individual bank failure into *systemic* event. After all, not only are bank assets and profitability are subject to common factors, monetary, informational, or otherwise, it is also the case that, behaviourally speaking, *bad news tends to be self-reinforcing*. Indeed, such a phenomenon might even prove quite hazardous in a *self-fulfilling* sense—perhaps not unlike the situation depicted by those so-called 2nd-generation currency crisis models [19], albeit in a very different context.

Before we go on to discussing possible solutions to the procyclicality problem, let’s take this opportunity address a common misunderstanding: that procyclicality is part of a greater economic policy agenda, and therefore falls *outside* the national bank supervisor’s mandate, particularly in cases where this has been narrowly defined and limited strictly to *prudential stability*. Prudential stability is about ensuring that a system of bank thrives, that is, not just surviving but *performing intermediary functions*. To have most banks survive an economic downturn by ceasing private lending, i.e. put them on a strict diet consisting entirely of government bonds, would be ultimately self-defeating.^v Such is the danger of “treating default costs as the only legitimate ... objective ...[to the extent of] ignoring the importance of the bank lending function.” [16]

But Basel II is likely to stir up issues well *beyond the prudential mandate*. Presupposed by the discovery of a *capital channel of monetary policy conduct* [15], Basel II

is cited as an impediment to effective conduct of the monetary policy, *for it caps credit expansion just precisely when the central bank initiates a monetary boost*. Moreover, with capital regulation essentially imposing a *quantity-based ceiling* on credit activities, incentives for price competition (lower loan pricing) among banks are weakened, and collusive tendencies reinforced [10][20]! Ultimately there is no point having in place a capital regime that strengthens banks' balance sheets, only to weaken them strategically by imposing quantitative limits and discouraging price competition.

Turning now to discussing possible solutions to the procyclicality problem, it is important to distinguish between *procyclicality countermeasures* and *counter-cyclical measures*. Counter-cyclical measures are geared toward reducing the real-sector cyclicality e.g. raising the cost of funding when the economy heats up, issue statements of assurance when the market feels nervous, and so on, indeed the sorts of things lay people expect the *central bank* to do^{vi}, regardless of whether banking oversight is part of its policy portfolio. In contrast, procyclicality countermeasures here refer, in a narrower sense, to measures aimed at correcting undue procyclicality tendency, such as one attributed to Basel II.

In that respect, let's envision one day being able to engineer an intelligent-adaptive prudential framework within which the capital adequacy criterion is dynamically under- and overemphasised in a carefully timed manner that directly counterweight procyclicality tendency. But for this vision to be realisable—never mind that we still have some way to go in terms of understanding the dynamics governing procyclical impacts on bank capitals [17]—the principle and practice of *supervisory review process*, i.e. under *Pillar 2*, must be truly *symmetric*: we must be able and willing at times to *relax*, as well as *stiffen*, capital requirements relative to Pillar 1 calculations. But is this the case?

2.2 Competitive Landscape

Less researched and correspondingly less understood than the procyclicality effect of Basel II is its impact on the banking-sector competitive landscape. The question of affecting *competitive balance* in a detrimental, or at least unanticipated, manner can be posed with respect to competition among banks pursuing different approaches within Basel II (i.e. SA vs. IRB)^{vii}, between banks and non-bank financial institutions (i.e. consumer credits), between local banks and branches of international banking conglomerates, and various other permutations thereof. No doubt, some impacts will be categorically beneficial; some will be categorically detrimental. Yet other impacts will tip the competitive balance in favour of some at the expense of the others, and vice versa.

But while very little is certain at this point, this much is: of all the policy agendas promised by Basel II, creating so-called “level playing field” has to be one of the most questionable assertions, especially when it comes to implementing Basel II among non-G10 economies. For a start, Basel II is process-, rather than result-oriented, which really means it's budget-oriented, and international banking conglomerates can both outspend and

subdivide consultancy and/or development overheads better than any strictly local entities. Turning to investment in database and the picture is the much same, or worse: not only are international banking conglomerates in a better position to amass data, much of Pillar 1 itself is parametrically tuned for G10 economies from which these banking giants are based.

3. Institutional Challenges

3.1 Institutional Capacity

The institutional challenges here firstly concern the widening knowledge and technology gaps between banks and bank supervisors.

It is by no accident that in many countries, a concentration of highly qualified monetary economists finds themselves working with, if not for, the central banks. It is also the case that one expects to find highly qualified professional accountants and financial analysts involved in banking audit and supervision. Relatively recently, with the rapid growth of *financial derivatives*, many physics & mathematics graduates soon found out that they could “earn a lot more working on a lot less difficult set of problems”. Big banks began placing these cross-disciplined *financial engineers* at the business end, where they research and develop pricing models for *exotic options* and *structured products* so that traders (often themselves rotated onto the trading desks) can quote them to clients. While these products add *nonlinearity* and *discontinuity* to the trading book P&L, for the time it was feasible for the in-house *risk management committee* to rely on simple, intuitive risk measures, notably of the *Value-at-Risk (VaR)* variety. If banks’ own risk management oversight did not need to get down and dirty with the technical details, then bank regulators even less so. So the principal bank supervisors’ *skill set* remains “traditional” finance and accounting.

Gradually more mathematics found their way into the realm of risk management. Again for a length of time, “mathematics for risk management” remained recognisably simpler than “mathematics for options pricing”. A bit of *differential/integral calculus* and *matrix algebra* was enough to see one through. At this point bank supervisors had no troubles keeping up with their commercial counterparts (in risk management function). After all, advanced options pricing models involving *stochastic calculus*, *partial differential equations*, *measure theory* foundations, *stochastic processes* of various sorts, *Monte Carlo simulation*, and perhaps *dynamic programming*, were motivated by the front end of the derivatives trading and investment banking lines of business, not by supervisory concerns. Meanwhile resourceful banks continued to recruit top-class Ph.D. graduates; yet more resourceful banks simply recruited undergraduates first, and then sponsored them on top-notched Ph.D. programmes.

The wake-up calls for supervisory authorities worldwide came *when credit risk modelling began to converge with derivatives pricing*. This happened in two ways. First, while strictly *agency ratings-based* and *bond spread-based* credit risk models continued to

make headway, a new class of credit risk models, based on the options notion of bond holders being short call positions on firm assets, started to gain prominence, namely the *asset-value process-based structural models*. When Basel II set out to recognise and legitimise the use of these as the method by which to estimate the *Probability of Default (PD)* parameter, whence to be used as an input to the IRB risk weight functions, bank supervisors soon realised that options pricing *technology* now evades their workspace. They also needed to familiarise themselves with such attendant technology including *multi-factor models* and *heteroskedastic time-series analysis, stochastic volatility models, nonparametric (kernel) estimation*, and so on. Aside from ratings/spread-based and structural models, Basel II will also recognise and legitimise the use of *default intensity-based reduced-form models*. Because they are essentially *imported technology*, i.e. from the long-established field of actuarial sciences, bank supervisors now need to study those too.

The other phenomenon by which credit risk modelling and derivatives pricing began to converge is the maturation of the global markets for *credit derivatives*. Beginning with *Credit Default Swaps (CDS)*, *single-obligor* credit risk became the underlying factor driving derivatives valuation. And advances on both fronts, modelling *individual* credit risks and pricing *single-name* CDS, went hand-in-hand. More recently, with the growing popularity of *Collateralised Debt Obligations (CDO)*, *multi-obligor* credit risk came to the fore. And advances on both fronts, modelling *portfolio* credit risk and pricing *multi-name* CDO, are not only progressing hand-in-hand, they have come to rely on development in yet another hitherto-ignored, largely-academic field of study, namely *dependence modelling* via probability *Copulas*. To a lesser extent, but in a similar vein, the *Advanced Measurement Approach (AMA)* to measuring operational risk under Basel II allows modelling methodologies based on *Extreme Value Theory (EVT)*, originally the preserve of catastrophe insurance pricing, to become an integral part in the development of quantitative *enterprise-wide risk management* for banks. So now bank supervisors duly need to put EVT onto their learning agenda as well. In short, the *art and science* of quantitative modelling, as well as the *mathematics and statistics* of financial engineering, increasingly become part of modern bank supervisors' skill set. Since such a skill set cannot be expected of the entire institution, it becomes imperative that the BOT initiates a sort of quantitative modelling and financial engineering *specialist programme*.

The institutional challenges also concern new type of knowledge necessary to address systemic implication of regulatory policies and *macroprudential conditions*. One may speculate here that such a form of knowledge would involve such *connectionist modelling* topics as *graph theory, evolutionary algorithms*, and *artificial neural networks*. And as we saw, working out the competitiveness balance issue from such new and complex regulatory frameworks as the Basel II is by no means a straightforward proposition. One may speculate further that the necessary knowledge will arise from such new and evolving areas of

economics as *game theory*, *institutional incentives*, *economics of auctions*, and *dynamics of public-goods equilibrium*.

The learning agenda is enormous and rapidly expanding, but it also helps that there is a clear priority generally from *financial engineering* in particular to *quantitative modelling* in general, and then onto *connectionist models* and *institutional economics*.

3.2 Institutional Credibility

If new knowledge and expanding skill set is the question of way, we also have the question of will. In the narrowest sense, this refers the BOT's willingness to exercise the Pillar 2 of Basel II, which leaves room for national authorities, in reviewing the results of Pillar 1 calculations and banks' internal process of assessing capital adequacy in relation to risks, to ask for quantitative adjustment to the amount of risk capitals deemed appropriate. With traditional banking examinations, given a limited amount of accounting manoeuvrability then available, it was rather clear if and when banks were doing something they were not supposed to do, and what remedial and/or punitive measures should be adopted. In such a supervisory context, it would be much clearer if and when to exercise regulatory measures.

With Basel II, the question now is whether bank supervisors, already made somewhat insecure by the deepening knowledge gap vis-à-vis their commercial counterparts, feel confident enough to make judgement calls over whether some very highly technical internal models developed by banks are appropriate, adequate, or misused? Detecting items hidden in financial accounts (for evidences of "cooking the books"), itself no small task, would pale in complexity when compared to safeguarding against the sort of *reverse-engineering* that would be possible to get highly technical internal models to produce desired risk estimates, whence "cooking the models". To have the will, bank supervisors must also possess the credibility, in this case the shared belief that (scientific) knowledge is on their side, which leads us back to the abovementioned institutional capability issue.

In the larger sense, will non-G10 bank supervisors from nascent financial system feel confident, as well as be credible, in devising, proposing and defending Basel II alternatives, modifications, or, dare we say, *successors*?

4. Conclusion

In adopting Basel II, a capital adequacy framework developed by, tailored for, and parameterised by G10 countries, our developing economy and nascent financial system is sure to be put under a series of demanding challenges. Some challenges were simply preparatory labours necessitated by the Basel II roll-out programme. This article, however, focuses on raising economic issues and institutional challenges that national banking policymaker, like the BOT, has the responsibility and obligation to try and anticipate, even if

these issues and challenges never appear in the pages of formal Basel II documents. This article cites procyclicality and competitiveness landscape as two main economic issues that warrant a proper policy response. This article also cites institutional challenges in the form of internal capacity and external credibility with which the BOT will discharge her mandates well into the new era of banking supervision under the Basel II.

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ⁱ It is true that the **Basel Committee on Banking Supervision (BCBS)** never claims universal truth for Basel II, indeed labelling it "international convergence". So it is conceivable, for instance, that non-G10 countries would ideally get around to devising their own **Internal Ratings-Based (IRB)** risk weight formulas (i.e. the *functional* forms as well as the *parametric* values) that cogently reflect non-G10 operating environment. However, a general consensus is that IRB functions tend to be rather opaque in terms of their derivation, based as they were on un-testable assumptions involving latent (hence unobservable) factors and abstractly asymptotic (thus idealised) arguments. More importantly, many IRB parameters were obtained from undisclosed data experiments, thereby eluding the scientific principle of *peer review* and *independent verification*. This relative lack of transparency with which model assumptions are justified and model parameters are calibrated makes any non-G10 replication exercise practically unachievable.

ⁱⁱ In the author's own personal view, even **Pillar 2**, the *supervisory review process* part of Basel II, is less about empowering national supervisory authorities to custom fit Basel II to

suit local conditions, and more about imposing upon them the *judgement-based* responsibility of making up for unforeseen shortcomings in the *formula-based* Pillar 1 calculations.

ⁱⁱⁱ Here it is worth pointing out and emphasising that ours is more stringent than a macroeconomist's use of the term 'pro'-cyclical to mean anything that merely moves 'with' (as opposed to 'counter' to) the economic cycles. Thus for us procyclicality factors comprise the mechanisms and channels governing this causal to-and-fro between the financial and the real, not merely factors that underline and deepen financial-sector *sensitivity to* the economic cycles.

^{iv} To this, one should also add statistical 'double jeopardy' in the form of *positive correlation* between the **Probability of Default (PD)** and the **Loss Given Default (LGD)** [3]. Indeed any form of regulatory calculation that multiplies two *positively correlated* quantities together will surely invite procyclicality criticism. Although, one could equably counter-argue that PD and LGD, whilst subject to separate statistical estimations, are essentially *pre-default* and *post-default* manifestations of a common credit phenomenon, in which case the supposed correlation is *de rigour* anyway.

^v It's as if an energy sector were to ride out an energy crisis by dispensing none, or if a transport infrastructure operator were to solve an infrastructure overload problem by not letting cars through.

^{vi} Certainly, as central bankers we *instinctively, almost habitually* put brakes on things. We do so in an *ad hoc* manner, as when we cast watchful eyes on an over-heated sector here, a macro-account imbalance there, respond to *any* signs of acceleration or accumulation anywhere anytime, be it in real-estate loans, consumer credits, or anything else we could put our finger to. We also do so in a rigorous, systematic way, as when we commit ourselves formally, in some cases constitutionally, to an **inflation target band**, i.e. a pre-emptive brake against *too much* as well as *too little* inflationary pressure.

^{vii} In the US, where there will be Basel II as well as non-Basel II banks, there is also concern that Basel II banks will be at a distinct advantage over non-Basel II banks. [6]