

World Bank Conference on
Systemic Financial Distress

October 8, 2003

Restructuring Individual Banks After a Systemic Crisis: Are Important Pieces Missing from the Financial-Engineering Puzzle?

Edward J. Kane, Boston College

A crisis and its aftermath raise the same issues as battlefield medicine.

- Loss-generating banks wounded by open deposit runs resemble serious casualties.
- Supervisory personnel resemble emergency medical personnel (“paramedics”) required to administer first aid to wounded banks under continuing hostile fire.
- Lobbying resembles pleas for help from wounded
- Containment strategy, like battlefield medicine, seeks to locate the wounded, alleviate their suffering, and temporarily stabilize their condition.
- The tools of a paramedic are preliminary treatments: kind words, painkillers, tourniquets, and bandages. Each is limited in amount available.
- Financial-sector restructuring resembles follow-up surgery that take place in a more sterile environment located some distance from the firing line.

Three Phases of Crisis Management

1. Immediate Damage Containment
2. Medium-Term Restructuring of Insolvent Banks
3. Long Aftermath: Settling Program Costs onto Taxpayers
 - Containment and Restructuring are Siamese-twin *tax-transfer programs*.
 - Politically influential sectors seek to redistribute losses and risks away from the immediate victims of the crisis.
 - How much good supervisory “surgeons” can accomplish depends very much on how well the battlefield medics have prioritized the wounded.

Well-Begun is Half-Done

- Policy actions taken to contain a developing crisis—particularly the issuance of extensive liquidity support and government guarantees—transfer risk capital to insolvent banks.
- The fiscal resources needed to support the promises that convey this capital constrain policy options for dealing with insolvent institutions in the restructuring phase.

Restructuring must be supported by careful diagnosis and a prioritized queuing for conclusive treatment.

- Restructurers use sophisticated methods to estimate asset values and seek lasting methods for restoring salvageable institutions' **profitability** and **reputation**. Their task is to identify, clean up, and consolidate the portfolios of insolvent banks and to see that the capital positions of the reconstituted firms is adequately patched up by financial surgery.

- When credible government capital is injected, the government faces three accompanying challenges:
 - 1) to control the **amount of new debt** that wounded institutions load onto the balance sheet of the government,
 - 2) to control how **prudently** guaranteed institutions invest the funds they receive, and
 - 3) extract the government's support once the restructuring process goes forward.
- The third challenge is particularly tricky. Once the government has stepped in, it is hard:
 - to persuade the banks to **let the government fully cash out** again and
 - to **convince the public** that government support won't be renewed at the first sign of another panic.
 - Honohan assumes these tasks have been done and done well. But this has seldom occurred!

- Accountable and time-consistent recapitalization policies are hard to devise in the wake of the turmoil and conflict a crisis generates.
- Infrequency of crises --and lack of planning and rehearsal for them-- shortens policymaking horizons and leads to copying uncritically policy responses recently employed elsewhere.
- The policy experience Honohan reviews is a sequence of trial-and-error decisions. Because policymakers **disguise subsidies** and **deny or cover up their errors**, it's important that an expert outsider such as Honohan analyze the wisdom and success of particular restructuring programs.

Financial Engineering Creates Incremental Economic Balance Sheets

Government		Insolvent Bank with Initially Negative Net Worth of N_0	
Hybrid Debt –equity Claim on Bank	Assets and guarantees injected into the Bank	A	C
C	A	(G-F)	New Private* Equity: B
Capitalized Guarantee Fees	Value of Guarantees		
F	G		

* Possibly from foreign sources.

SUBSIDIES/ TRANSFERS

- To the extent that A exceeds C , the government is implicitly transferring **free equity** capital to the recipient.
- Similarly, any excess of G over F transfers further free equity capital from taxpayers to recipient banks.
- **Intertemporal or long-run budget constraint:** The present value of injected government capital must ultimately be supported by increased taxes or decreases in other spending programs.

An optimal policy program would use the instruments A, C, and F to maximize the discounted value of program benefits $D(t)$ over an appropriate Horizon (H), subject to a budget restraint imposed by the present value of available budgetary resources R and the discounted value of costs of benefit production $C [D(t)]$:

$$\begin{aligned} & \text{Maximize } \int_0^H D(t) dt, \\ & \text{Subject to : } \int_0^H C [D(t)] dt \leq R. \end{aligned}$$

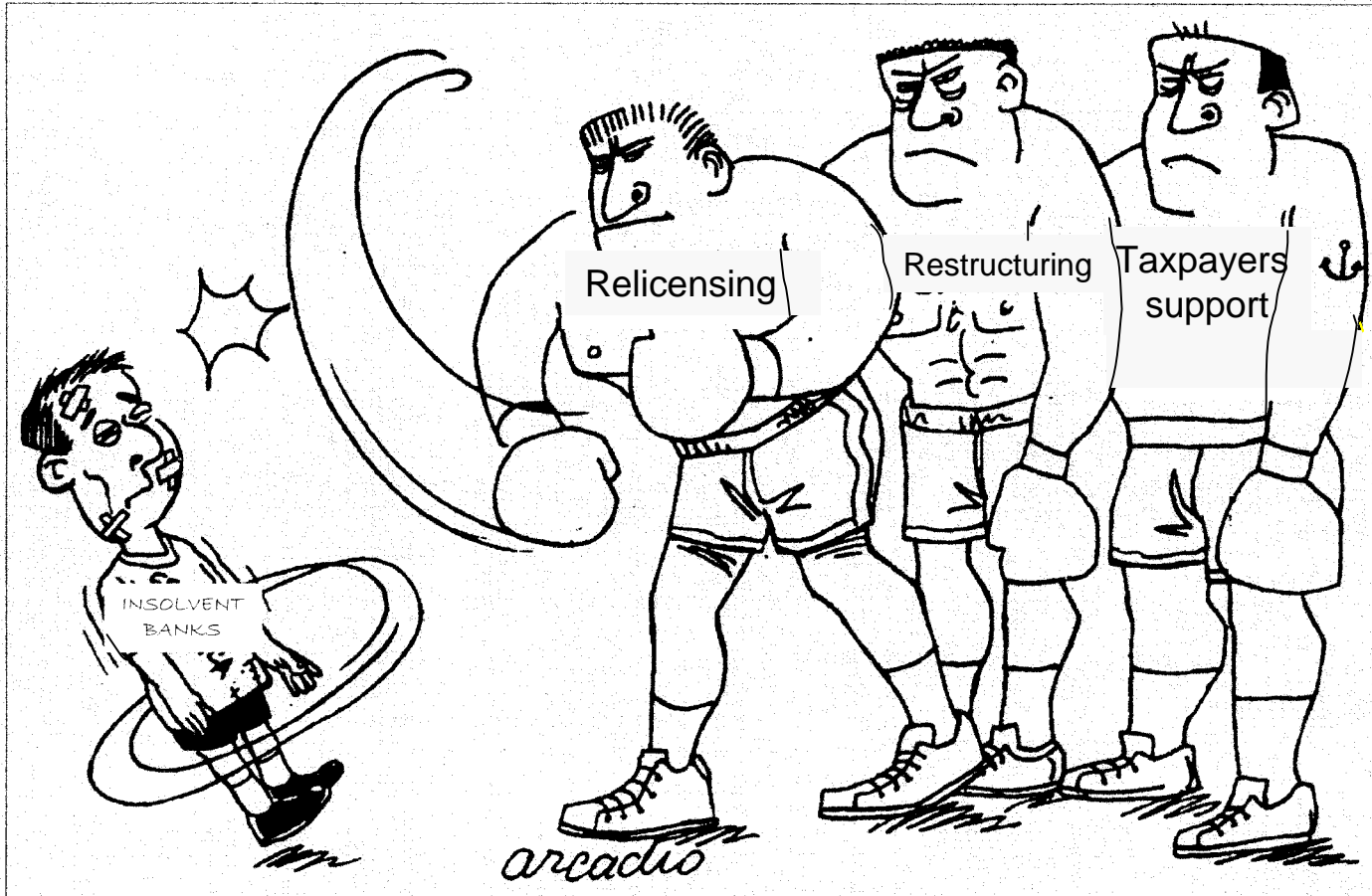
The 4 Benchmark Principles Honohan States to Guide the Design of Restructuring Programs that Do Not Solve this Intertemporal Problem

- I. Value of $A-C [+ (G-F)] \approx -N_0$
- II. A should be designed to be tradable in a liquid market
- III. $C \approx$ Enforceable Contingent claims that have a reasonable upside
- IV. Ideally, $(A-C) [+ (G-F)] + B \geq$
Regulatory Minimum

The author's restructuring principles oversimplify policymakers' optimization problem:

1. the benefit integral should start at the zero hour.
2. the government's tax capacity and budget constraint limit the *number* of banks that can be salvaged and the *size* of the subsidies each receives.
3. This means the decision model needs additional equations (or "puzzle pieces"), that can explain:
 - a. Tradeoffs between restructuring and other future uses of taxpayer funds;
 - b. Criteria for deciding which troubled banks are and are not to be relicensed;
 - c. How relicensing decisions and subsidy amounts can be expected to attract new domestic and foreign private capital into the banking system, and **keep it there**.

OPTIMAL SEQUENCING FOR KNOCKING HOPELESSLY INSOLVENT INSTITUTIONS OUT OF THE GAME



Adapted from a cartoon drawn by Arcadio/*La Nación*/San José, Costa Rica
Cartoonists & Writers Syndicate

- Honohan notes that, with meager taxpayer resources or political support, some crisis governments cannot issue sufficiently credible assets and guarantees without outside help. (Say, from the IMF.)
- But outside lenders place **constraints** on the program's size and character that introduce further considerations into the government's optimization problem.

PARTICULAR DANGER OF BLANKET GUARANTEES

- Banks whose credit is fully guaranteed can issue the **functional equivalent of new government debt** as long as they remain open. This tempts managers of insolvent banks to abuse their access to government assistance by dividending out their capital and taking on inordinately high-risk projects.
- Although such abusive risk-taking damages a nation's capital stock, it makes great sense to owners and managers of undercapitalized banks.

COUNTRY EXPERIENCE

Restructuring policy can ignore relicensing issues, tax capacity, and political support only in countries where these constraints and issues are of secondary importance. A missing piece of the argument constructed in the paper is a demonstration of how the government's long-run budget constraint influenced the sequence of decisions adopted in the five cases the author reviews:

Mexico?

Thailand?

Argentina?

Bulgaria?

Cameroon?