# Competition Policy and Inclusion in the Philippines

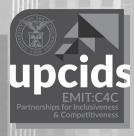
RAUL V. FABELLA SENEN C. BACANI ANDRE PALACIOS





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## Introduction

In every economy, there are three possible domains of resource allocation: first, the state where the allocation and management of resources is administered centrally and by command; second, the market where the allocation and management of resources is done decentrally by private agents in pursuit of profit; and third, complex projects where both the market and the state cooperate in partnerships (i.e., public-private partnerships or PPPs) that exploit each other's strengths and plug each other's weaknesses.

Simple economic common sense dictates that the social optimum is served if economic activities are assigned to the three domains according to each domain's comparative competence. This efficiency rule is eminently pragmatic: the domain that can deliver a good or service of a given quality at the lowest cost must deliver it. The state should do more in activities properly in its domain; it should do less or retreat from activities where the other domains have the competence advantage. Complex projects have some aspects such as day-to-day operations management that the market does better and some such as right of way acquisition that the state can do better.

The Philippines has decided to make the market as the engine of growth. This means an expanded role of the market and of the private sector in the allocation of resources. This was, for example, obvious in the Electric Power Industry Reform Act of 2001 or EPIRA (Republic Act No. 9136) which restructured the power sector; and the Downstream Oil Industry Deregulation Act of 1996 (Republic Act No. 8180) which restructured the downstream oil industry sector. Both represented major retreats of the state from the market.

Recent developments and scholarships have shown that the market is a superior modality for economic growth to a *dirigiste* one (see, e.g., Yergin and Stanislaw 1998; Landes 1998). It may, however, not necessarily foster the income distribution and inclusion that society wants (Piketty 2013) even in the best of circumstances. For markets can fail, that is, frequently, markets fail to deliver the best social outcome available—in this case, lower prices and highest consumer welfare, not to say the most equitable one. Abuse of market power by a dominant firm or by a cartel can raise prices and reduce access by the poor. Although there are instances when the market does heal

itself, this is usually facilitated by a new technology, which is normally a random event which may take a long time (see Box 1 on page 13). The canonical expectation is that without outside intervention by the state, a market failure will perpetuate itself.

Competition policy aims to make the market work better for society by, among others, (1) clearing the way for entry of other players where such entry is efficient; (2) preventing abuse of market power—cartels and/or collusions to limit output and raise prices; (3) preventing mergers and acquisition that severely limit competition; and (4) easing access by other competitors to essential input or backbone facility. Competition policy normally looks towards increasing competition by facilitating the actual or potential entry of more players in extant markets. While the canons of competition policy are well known (see, e.g., Cook 2004; Medalla 2004; Lee 2007), their application must be guided by local and sometimes idiosyncratic conditions (De Leon 2000). For example, in the Philippines and consequent to its history, many anti-competitive structures emanate from government enactments and mandates. Likewise, where state institutions are weak, as they are in the Philippines, the antitrust heritage of competition policy should be employed with greater care. To deal with anticompetitive structures, whether state-mandated or cartel-based, the Philippine state has passed the Philippine Competition Act or PCA (Republic Act No. 10667) which constitutes and mandates the Philippine Competition Commission (PCC) to enforce its provisions.

There are interventions other than competition policy that the state can and does employ to improve the workings of the market. Regulation is the more common instrument used by the state to orient the market towards greater consumer welfare. Regulation is a set of behavioral rules laid down by the state that governs the behavior of a specific firm or firms in an industry (Shogren 2002; Lee 2007). For example, the Energy Regulatory Commission (ERC) approves or disapproves in accordance with explicit rules the tariff adjustment petitions of power distribution utilities. The Sugar Regulatory Administration (SRA) determines how much the sugar industry can sell to the domestic market. In the immediate post-World War II era, state ownership was popular the world over as a rampart against abuse of market power among the socalled "commanding heights" of the economy (see, e.g., Yergin and Stanislaw 1998) those industries that occupy strategic positions in the economy, such as banking, power, telecommunications, and transportation. As heirloom from that past, the Philippine government still owns, for example, the Development Bank of the Philippines, the Philippine National Railways (PNR), and the Philippine Ports Authority (PPA), among others. Power generation was largely the monopoly of the state until the mid-1990s. Fortunately, state ownership has retreated to the sidelines as primary rampart to abuse of market power since the 1980s when deregulation and privatization took hold and the Socialist worldview faded. But whatever intervention in the market is adopted by the state, it can only improve welfare if there is a pre-existing market failure.

The purpose of this review is a broad-stroke scan of the accepted canons of competition policy and the benefits of their proper application to Philippine conditions. In-depth analyses of industry and sectoral competition issues required for deciding over industry-specific issues are not our goal here. Rather, the goal is to put both the PCC and broad Philippine stakeholders on the convergent footing towards what is in the best interest of the whole economy.

In Chapter 1, we introduce varieties of market failures and the remedies that a government may adopt to fix them. We are particularly concerned in distinguishing between market failures to which competition policy is the best address, those ones to which regulation is the best address and, finally, where a combination of both works best. Cooperation and coordination market failures, scale economies market failures, and meta-market failures are in the domain of regulation. Artificial market powerbased failures are in the domain of competition policy. Franchises enjoyed by private players are best awarded competitively and subject to regulation thereafter. We also recognize and discuss a genre of market failures that an imperfect state cannot and should not even try to fix. Where possible, we show and compare the static welfare gains of competition policy remedies. In Chapter 2, we deal with the dynamic welfare impact of greater competition through increased effort at innovation—an impulse generally absent in regulation. The advantage of competition policy is further emphasized when we introduce Bertrand competition (where rivalry among firms is expressed through alternating price discounts) and discuss its impact on welfare, innovation, and the formation of trusts. Chapter 3 presents and discusses the various competing philosophies, structuralist versus consequentialist philosophies, underlying competition policy observing that the consequentialist philosophies have current ascendancy—a development we think is fortunate for countries in the catch-up stage of development. Chapter 4 discusses the various issues related to the relevant market: smallness of markets, existence of imperfect substitutes, non-integration of markets, state-mandated anti-competitive rules, and associated competitive non-neutrality. Chapter 5 deals with the role of institutions in the choice between competition policy and industrial policy especially relevant to East Asian exceptionalism debate. Chapter 6 gives a short survey of the literature on the effect of competition and competition law on growth, innovation, total factor productivity, and direct foreign investment. Chapter 7 deals with the need for PCC to prioritize with the view to maximize the "bang-forthe-buck" of its actions—by sector in respect to poverty reduction, complaint-based issues raised by victims of abuse of dominance; and finally, the use of credible and verifiable undertakings in mergers and acquisitions (M&A). Chapter 8 surveys the legal and institutional scaffoldings of the Philippine competition landscape. Chapter 9 summarizes and concludes.



1

# Market Failures, Remedies, and Static Gains

A market failure is a situation where an inferior social outcome is attained when players pursue their own individual self-interest. For example, abuse of market power by a dominant firm or by a cartel can raise prices and reduce access by the poor. There are different types of market failures, and some interventions are better suited for some market failures than for others. To better fix ideas, we present certain types of market failures to see how they can be fixed by certain interventions. We start with an iconic market failure called "the fishing game."

The fishing game has two players, Ambo and Berto. Both earn their living by fishing in the same body of water. Each pursues his own self-interest, that is, prefer a large payoff to a small one. To fish, each can use either Nets (N) or Dynamites (D). The game with specific payoff is represented by Table 1.1 (on the next page). Here, to start with, there does not exist a state or government that regulates fishing in the jurisdiction (the "invisible hand" regime). As well, Ambo and Berto are assumed not socially related and may well be complete strangers to each other. The payoffs given in the table are assumed present values of a lifetime stream of incomes.

The pair of payoff numbers, say (2, 14), corresponds to Ambo choosing N and Berto choosing D; first number "2" is Ambo's payoff and the second "14" is Berto's payoff under action pair (N, D). The use of dynamites by players degrades the fish stock and progressively reduces the fishing-related incomes. The game in Table 1.1 has the structure of a prisoner's dilemma game (PDG) of the dominant strategy variety.

<sup>&</sup>lt;sup>1</sup> This chapter is based on Raul Fabella, "Competition, Regulation and Institutional Quality," UPSE Discussion Paper 2017-01 (Quezon City: University of the Philippines School of Economics, March 2017), <a href="https://www.econ.upd.edu.ph/dp/index.php/dp/article/view/1501/983">https://www.econ.upd.edu.ph/dp/index.php/dp/article/view/1501/983</a>.

Actors/Actions		Berto		
		N	D	
A I	N	12, 12	2, 14	
Ambo	D	14, 2	4, 4	

TABLE 1.1 • Payoff matrix of "the fishing game:" Invisible hand

The action pair (D, D), meaning, Berto chooses D and Ambo chooses D giving payoff (4, 4) is the Nash equilibrium (indeed, the dominant strategy Nash equilibrium) of this game, that is, once in (D, D), the players have no incentive to shift strategies—if Ambo stays put at D, Berto who shifts to N loses (gets 2 versus 4). The Nash equilibrium (D, D) is stable and is in this case unique because no other payoff profile has this property. But there is a payoff (12, 12) given by action pair (N, N) which is feasible for the players and better than the (4, 4) payoff of (D, D). Yet (N, N) will not be attained, or if attained perchance does not persist since (N, N) is not a stable outcome. If the players are at (N, N), one player, say Berto, will do better if he bolts to D (Berto gets 14 instead of 12). Ambo thinks the same way and so will also shift to D. Both will end at (D, D) giving (4, 4), the inferior outcome. Payoff (12, 12) is the socially superior and feasible outcome but the game will settle at inferior payoff (4, 4) given by (D, D). Thus, both players pursuing their own self-interest will attain an inferior outcome (4, 4). This makes the game a market failure. All market failures have this character.

#### Market failures fixable only by regulation

This fishing game market failure can be fixed by regulation, that is, by a statute that adequately punishes the use of dynamites (see Fabella 2017). By contrast, the Fishing Game market failure cannot be fixed by raising the number of fishermen in the area. This would just result in another market failure, what is popularly known as "the tragedy of the commons." The tragedy of the commons is familiarly associated with the overexploitation and degradation of common property resources such as forest cover, clean air, and fish stock which are owned by no one but accessible to everyone.

Another market failure where only state regulation works to improve the social outcome is the case of a "natural monopoly" where substantial scale economies operate to make a single firm the most efficient industrial organization, i.e., many firms producing at smaller scale raise the average cost drastically so that consumer surplus decreases relative to monopoly status quo (more on this below). Inclusion is not served by raising competition.

The power distribution segment of the power sector (the distribution utilities or DUs) is considered by EPIRA as a "regulated sector;" DUs each enjoy a franchise so that

no other distribution utility can operate in the franchise area. The efficiency rationale is precisely because duplication of the wires delivery network will be wasteful. The DUs however have to be regulated because they have "captive consumers," consumers that cannot go elsewhere for their power needs even when subjected to abuse. As observed above, the ERC is the government agency that approves the DU power rates to counter any abuse of market power. But the power generation segment of the power sector is considered by EPIRA as "competitive," that is, the price and terms of their power supply contract (PSA) is determined by negotiation among market players and not by a state agency. In Resolution 13 in 2015, ERC has required DUs to submit their PSAs to competitive bidding so as to address yet another possible market failure associated with transfer pricing or sweetheart deals (see Fabella 2016). This, needless to say, is in keeping with the spirit of the PCA.

The third genre of market failures that cannot be fixed by competition policy is what we call elsewhere "meta-market failure" (Fabella 2014b). This is not the garden variety market failure such as "the fishing game," "natural monopoly," or the "public goods market failure." This was highlighted by Piketty (2013), who showed empirically that income inequality tends to rise without limit even in the most developed of economies. This means the Pareto optimal distribution attained by even well-behaved markets is not necessarily the socially optimal distribution favored by the polity and which gives a higher value to more equitable income distribution.<sup>2</sup>

#### Market failures fixable by competition policy

We now turn to the genre of market failures that competition policy can fix. Suppose the market is served by a single firm, a monopoly either mandated by a legal franchise or one enabled by collusion without the benefit of scale economies. We call this an "artificial monopoly."

The artificial monopoly as market failure: A graphical rendition

The following section is intended for stakeholders who are still half-convinced or have doubts about the welfare and pro-poor effect of competition policy. Though the material here is better appreciated by those who have had some elementary Microeconomics, the interested general reader would also benefit with a little forbearance. The discussion will be presented in a step-by-step fashion for the benefit of the latter. How does competition

<sup>&</sup>lt;sup>2</sup> Piketty inadvertently made salient the second fundamental theorem of welfare economics which states that for every Pareto efficient allocation, there is a redistribution of initial assets which will marketsupport the allocation. Only state intervention in the form of wealth or income taxation can fix this market failure.

policy serve inclusion? By inclusion, we mean here lower price and greater access by the buying public.

Suppose there is an artificial monopoly in the market for a single good or service q. Think of commodity q as "rice" in a specific location. Let there be no close substitute for q (corn not being a close substitute except in Cebu). The price of q is p. Demand is linear and the average cost is constant at c > 0. Thus, there is no cost economies and no basis for a natural monopoly. These industries are "constant cost" as opposed to "decreasing cost industries" (Garvey and Garvey 1990). We first show this as a market failure. As is well known from introductory economics, the monopolist will maximize profit at  $(q^m, p^m)$  given in Figure 1.1 below.

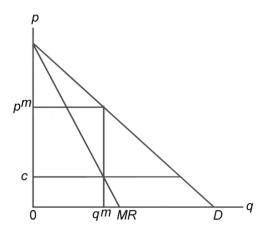


FIGURE 1.1 • Monopoly equilibrium

Note: D in this figure is the demand curve which represents the buying side of the market, MR is the marginal revenue curve, c > 0 is the constant marginal cost, p is the price, and q is the good/service. For a competition agency such as PCC, what is important is the distribution of the engendered economic surplus (the welfare outcome) produced by market; in this case, a monopoly.

We turn to the welfare outcome of the monopoly. Figure 1.2 (on the opposite page) gives the consumer's surplus (in yellow), the firm profit (in blue), and the deadweight loss (in red).

Consumer's surplus (in yellow) is the concept that economists use to represent what consumers actually realize from the market. It is the sum of all the individual surpluses (i.e., the difference between utility benefit derived less the price) of all buyers of q. Consumer's surplus is a measure of consumer welfare which is the principal concern of PCC (sic World Bank-OECD 1999). Firm profit (in blue) is what goes to the firm and its shareholders. The deadweight loss (in red) goes to nobody in society, thus, the measure of economic waste. This is a market failure because the deadweight loss (in red) is

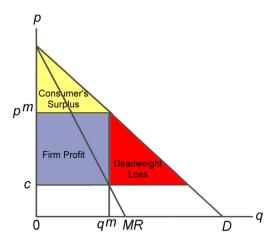


FIGURE 1.2 · Monopoly welfare outcome

positive; likewise there is a feasible outcome defined by p = c where the consumer's surplus is maximized (to be shown below). The mandate of the PCC is to raise consumer welfare (in yellow) as much as possible, in this case, by reducing the deadweight loss (in red) and reducing firm profit but in a sustainable way; by "sustainable," we mean that the service or commodity q does not go missing. A missing market is one where the commodity or service q is unavailable at any price. Sustainability is important because the consumer's surplus when a market goes missing is zero. Thus, the missing market brings the worst welfare outcome. Now let us see how behavior can be reoriented to deliver a higher consumer's surplus.

#### Disrupting the anti-competitive status quo

The PCC can disrupt the anti-competitive status quo by sponsoring or supporting a legislation lifting a legal franchise unsupported by scale economies, thus, doing away with the legal but artificial barrier to entry; or if the monopoly is due to a cartel, the PCC can, after due process, declare the cartel illegal and impose a heavy fine, thus, causing it to break up.

Suppose that in the wake of the PCC action a second firm producing identical q enters the market. Now there is some competition in the market with two firms (a duopoly) instead of one firm (a monopoly). Assuming a symmetric Cournot competitive market (SCC), the market price of the duopoly is  $p^d$ , and the welfare outcome of a duopoly is given in Figure 1.3 (on the next page).

Note that the consumer's surplus in Figure 1.3 (in yellow) has increased in size. By contrast, the deadweight loss (in red) has shrunk in size; so has the firm profit (in

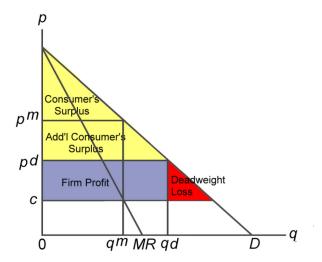


FIGURE 1.3 · Welfare impact of a duopoly

blue) compared to that in Figure 1.2. The increase in consumer's surplus comes at the expense of the profit of the firm (the lower price effect) and of the deadweight loss (the higher output effect). Both these effects are due to increased competition.

The PCC action—by allowing entry of one other firm—has reduced the price (from  $p^m$  to  $p^d$ ), increased output (from  $q^m$  to  $q^d$ ) and, in the process, raised consumer welfare and consumer access. More income-poor households can afford q or more of it. Thus, competition policy makes the market work better—has deepened it and made it more inclusive. The duopoly has only alleviated but has not yet solved the monopoly market failure completely. The duopoly can still be improved upon, as we shall show below.

#### Triopoly: Three firms compete

It is easy to glean from Figure 1.3 that the more firms enter the market after the lifting of entry barriers by PCC, the better off are the consumers. Suppose two firms enter instead of just one, we then have a triopoly (three firms). The market price will slide further down the demand curve D. The resulting market price will be  $p^t$  and is thus lower than  $p^d$ . This means that the triopoly price is lower ( $p^t < p^d$ ) and the triopoly output higher ( $q^t > q^d$ ). This fact is reflected in Figure 1.4 (on the opposite page).

It is clear that consumer's surplus (in yellow) has risen further. The aggregate firm profit is even smaller (in blue) and the deadweight loss (in red) has shrunk further. The price of q is  $p^{d'} < p^d$  and output of q has increased further ( $q^d$ ). The market is now even deeper and more inclusive. This was precisely the welfare improvement sought

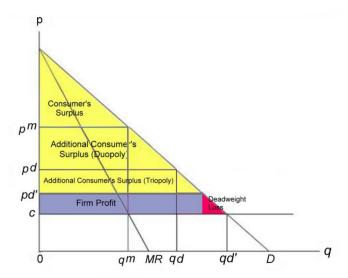


FIGURE 1.4 • Welfare outcome of a triopoly

by the Department of Information and Communications Technology (DICT) when it advocated that a third telecommunications provider be enabled to compete with the duopoly of Globe Telecom and PLDT–Smart Communications. The third player that has now emerged, DITO Telecommunity Corporation, was awarded the Certificate of Public Convenience and Necessity (CPCN) in 2019. It remains to be seen whether the welfare improvement will materialize to justify the effort.

Welfare at the Walrasian limit of the symmetric Cournot competition

Suppose we extend the case of triopoly in Figure 1.4 above to even a larger number of firms. As the number of firms becomes very large under symmetric Cournot competition, we approach the Walrasian limit. The welfare outcome at the Walrasian limit is given in Figure 1.5. The monopoly market failure is now completely solved.

At the Walrasian limit, all firms operate at p = c or price = marginal cost. The quantity supplied  $q^c$  is at its largest without a subsidy. Note that none but the consumer's surplus survives (yellow); the aggregate firm profit is zero (no abnormal profit) and the deadweight loss is zero. This situation is the "nirvana" of the symmetric Cournot competitive market with consumer's surplus at maximum. Its attainment emerges from competition among a very large number of firms. Abuse of market power is no longer possible since no firm has any market power. Only then is the market power failure in Figure 1.2 completely solved in the Cournot competitive market. Once in nirvana, no intervention in the market can increase consumer's surplus.

The welfare outcome in Figure 1.5 is also the potential outcome of state ownership—when the firm is owned and operated by a benevolent and competent state. In theory, a state-owned and -operated firm maximizes consumer welfare rather than profit, thus, potentially producing at  $q^c$ . Unfortunately, this potential outcome of state ownership proves a cruel chimera precisely because the state more often than not fails to be benevolent and competent (Cook and Fabella 2002). State ownership proves to be especially wanting in the innovation and investment aspect of firm management. The records show that state-owned enterprises were also turned into behest employment providers for political patrons, thus, becoming permanent drains on the state coffers. State ownership therefore largely underpinned the relative stagnation and eventual collapse of the Socialist challenge to market economics in the last decades of last century (Yergin and Stanislaw 1998).

#### Preserving the competitive status quo

Using Figures 1.2, 1.3, and 1.4 viewed in reverse order, we can now illustrate the welfare effect of the proscriptive instruments of PCC, viz., vetoing anti-competitive M&A and preventing collusive behavior. Suppose the status quo is a triopoly in the market given by Figure 1.4, each firm with its own factory. Sensing larger profit with collusion (blue rectangle in Figure 1.2 exceeds the blue rectangle in Figure 1.4), they decide to collude and act as a monopolist, in this case limit the supply of q to  $q^m < q^{d'}$ . This can be done either by (1) one firm acquiring ownership of the other firms (M&A), or (2) secretly coordinating output levels so that  $q^m$  is produced rather than  $q^d > q^m$ . The resulting reduced competition has increased the price and reduced consumer's surplus and inclusion.

The PCC, detecting a cartel or being apprised of it by consumer groups, cannot wait for technological progress to discipline the market, and so must move to break the cartel (a *per se* violation by PCA) or to veto the M&A. With heavy penalties threatened or imposed, the triopoly equilibrium  $(p^{d'}, q^d)$  is restored and its superior welfare outcome (higher consumer's surplus and lower deadweight loss) in Figure 1.4 is preserved. The competition agency has prevented the abuse of market power and the shift to an inferior market failure.

# Market failures best addressed by a combination of competition and regulation

Although natural monopolies are best disciplined by regulation, there is an aspect where market competition can be made to bear. The legal franchises associated with these monopolies are best awarded competitively, that is, auctioned off to the firm with the best bid in terms of quality and price. Thus, market competition is brought

#### BOX 1

#### OPEC, entry, and fracking

The Organization of Oil Exporting Countries (OPEC) assigns a quota for each of its member countries to maintain or attain a target oil price. That is a per se violation of PCA. Viewed from our graphs, the market moved from the welfare outcome of Figure 1.4 with a triopoly, to that of Figure 1.2 with a monopolist: the result is higher price  $p^m > p^{d'}$ , lower output  $q^m < q^{d'}$  resulting in lower consumer's surplus, higher firm profit, and higher deadweight loss. The OPEC had succeeded in the past to maintain a target price (say, USD 100 per barrel). In the case of global oil, there is no global competition agency to punish cartel behavior or the abuse of market power. So, for decades, oil importing countries had to grin and bear it. It was the entry of non-OPEC oil exporters drilling on higher cost wells made attractive by world petroleum price that limited OPEC's pricing power. Still, the world oil price settled around USD 100 per barrel in the first decade of this century. The 'fracking technology' devised among non-OPEC oil producers made hitherto unviable oil deposits viable at an even lower cost, sending the price of oil from USD 100 per barrel to USD 50.63 per barrel (in January 6, 2021). This was a considerable benefit to oil consuming nations. This illustrates two things: (1) the benefit of player entry in the world oil market which the PCC would like to replicate in the domestic market; and (2) that waiting for technology advance to weaken the cartel could take very long and can be very costly to society.

to bear at the start of the franchise. In the case of the award of water concessions in Metro Manila in 1997, this combination of competition and regulation worked very well. Firms first competed for the concession; the winner was subject to regulation by the Metropolitan Waterworks and Sewerage System (MWSS) in the next 25 years and, at expiry, the concession is again up for a competitive bidding. This combination has become standard in the award of infrastructure projects by the government.

#### Market failures not fixable by the state

There are genres of market failures that cannot be fixed when the state is imperfect—one whose organs of rule-making and enforcement are themselves frail and severely limited. The first is what is known as *constrained Pareto* market failures—market failures that the state cannot fix because the information required is not in theory accessible to the state or its organs (Stiglitz 1982). The solution to these market failures are intensive in the use of information which the state does not or even cannot have. The second is what has been called "RC-efficient market failures" (see Fabella and Fabella 2016), those that satisfy Williamson's (1996; 2007) "remediableness criterion." The latter criterion means that the relevant state cannot remedy the market failure with welfare gain because, with the current technology and capacity, the transactions cost required for a fix is just too high, thus, should best be left alone. RC-efficient market failures are intimately associated with the limited capacity of relevant states. The remediableness condition may be lifted with better technology or capacity.

What is the PCC's role with these genres of market failures? In so far as these are identified, PCC will do society a good turn by admonishing the state from intervening in such markets or persuading it to postpone its intervention until its institutional capacity has improved and the transactions cost of intervention has fallen by virtue of technical improvement.



2

# The Dynamic Welfare Impact of Competition: Innovation

The foregoing analysis revealed the static welfare gains from PCC actions. Perhaps even more telling is the dynamic impact of increasing competition. The monopoly in Figures 1.1 or 1.2 has little or no incentive to innovate because competition is absent and profit is large anyway. With the entry of another firm forming a duopoly, the profit of each firm will now depend on the comparative marginal cost. The lower is Firm 2's marginal cost relative to Firm 1, the higher is Firm 2's profit relative to Firm 1, and vice versa. Thus, there is an incentive for each firm to invest in innovation to lower its cost. If Firm 2 attains a lower marginal cost and increases its profit at the expense of Firm 1, Firm 1 will respond by either imitating the innovation of Firm 2 or doing its own innovation effort. We analyze only the case where both firms attain the same identical lower marginal cost  $c^{\wedge} < c$  (following Fabella 2017). Then the welfare outcome of the original disruptive act of the competition agency to allow entry of one other firm is even larger—the price  $p^{d'}$  is lower and the output  $q^{d'}$  is higher. This is given in Figure 2.1 (on the next page).

Figure 2.1 is to be compared with Figure 1.3, a duopoly without innovation. Innovation due to more competition results in lower marginal cost c' < c. This in turn lowers the equilibrium price to  $p^{d'} < p^d$  of the duopoly and higher output  $q^{d'} > q^d$ . The consumer's surplus increases by "additional consumer's surplus from innovation" (additional yellow). This again comes from lower price effect and higher output effect.

#### Inverted U hypothesis

The relationship between the amount of innovation and the number of competitors in the market (the competitiveness of the market) is now widely known as the

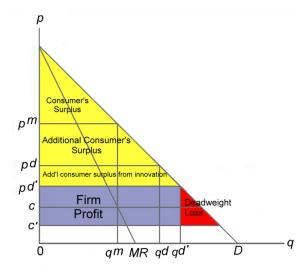


FIGURE 2.1 • Welfare outcome of a duopoly with innovation

"inverted U hypothesis," that is, the amount of innovation first rises with a few firms, reaches a peak with more firms, and then starts to go down with too many firms (Aghion et al. 2005; Clarke 2011; Onori 2015), as illustrated in Figure 2.2 (on the next page).

With a monopoly in the market, there is little or no incentive to innovate; as a few firms enter, the incentives to innovate rise, so more innovation is realized until a peak is reached now with many firms. Beyond that, innovation falls as returns to innovation begin to be diffused to too many firms (indeed, hardly any innovation under perfect competition). Contrary to the static welfare gain that monotonically increases as more firms enter the market, the stream of welfare gains when innovation is accounted for may not rise monotonically with the number of firms; it may at first rise, reach a peak, and then fall (see Figure 2.2).

#### Innovation, far-from-frontier economies, and economic convergence

The dynamic innovation effect is also important for low-income countries where firms are, as it were, "far-from-frontier" in comparison to their developed economy counterparts. For a low-income country to hop on the convergence trajectory with mature countries of the Organisation for Economic Cooperation and Development (OECD), firms in low-income countries must increase their innovation capability. Lack of innovation capability is the reason for the so-called "middle-income trap"—

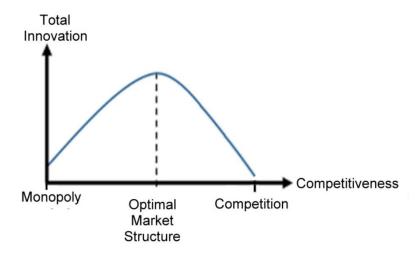


FIGURE 2.2 • The inverted U hypothesis

the inability of middle-income countries to cross the divide between themselves and the high-income mature economies. They will usually begin with simple process or imitation innovations (e.g., adopt the "just-in-time inventory system" or "quality circles") which reduce the marginal cost c. From there, they could graduate to more ambitious product innovation (new products or new versions of products, e.g., 4G—and now 5G—cellphones). Thus, competition policy by enhancing competition also improves the prospect for convergence of a far-from-frontier economy with high-income mature economies.

Figure 2.1 also illustrates the Schumpeterian viewpoint of dynamic innovation effect induced by competition. Maximum innovation investment comes from a few large firms competing rather than from many small firms competing (Baker 2003). In the Schumpeterian paradigm, the Walrasian limit which gives the largest static consumer welfare (see Figure 1.5) may not give the largest stream of consumer surplus in the dynamic setting with investment.

The principal reason why the Iron Curtain countries—then under socialist central planning—lagged behind their capitalist counterparts was the lack of innovation among state firms, which being monopolists encountered no competitive pressure. It was different in capitalist countries where for-profit firms faced almost Darwinian competitive pressure in every step of the way. In this latter environment applied the famous dictum credited to Andrew Grove of giant chipmaker Intel: "Only the paranoid survives."

#### Efficiency and innovation under Bertrand competition

For simplicity, we have opted in the previous section to implement our analysis under the symmetric Cournot competitive assumption where competition among firms is effected through the level of output supplied in the market. This Cournot quantity competition is instanced by the behavior of the OPEC. If you ask market players themselves, they will say that competition via price, that is, winning market share by offering lower prices, is also very important. Indeed, there is a phenomenon called "price wars" where two firms try to push each other out by progressively bigger price discounts.1

Under Bertrand competition, firms compete precisely through price offers for an identical commodity. The first result under Bertrand competition in a single product symmetric market is that two firms facing cost economies (subadditive cost function) will attain the efficient outcome given in Figure 1.5 (Baumol 1977; Baumol et al. 1982; Joskow 2007). But firms in a Bertrand duopoly each supplying half of the efficient level  $q^c$  will lose money and thus will not be sustainable. Thus, any single product industry characterized by some cost economies (falling average cost) will be a natural monopoly because any multi-firm market structure is unsustainable. This is highly counterintuitive to many thinkers.2

Competition policy has therefore no role to play under Bertrand competition and cost economies. Only regulation has a role to play. This is why we chose Cournot competition as vehicle of analysis for competition policy. It is now clear that under Cournot competition, cost economies no longer suffice to establish a natural monopoly (Amir and Lambson 2000; Amir 2003). Instead, only strong cost economies (subadditivity) support a natural monopoly but weak ones do not. Thus, in the latter case of cost economies, competition policy remains relevant for Cournot competing firms (see Fabella, Balisacan, and Quimbo 2017).

#### Price wars and trusts under Bertrand competition

Under Bertrand competition, the incentive to innovate is very powerful (see also Fabella 2017). This is because the Bertrand game of price competition is an all-or-nothing tournament—the firm that charges a lower price for the same q acquires all of the

<sup>&</sup>lt;sup>1</sup> The full-fledged price war for online DVD rental subscriptions between video streamer Netflix and brick-and-mortar rental and erstwhile leader, Blockbuster, in 2004 riveted public attention (Liebermann 2004). Blockbuster revenue kept falling while Netflix's kept rising and in 2010, Blockbuster filed for bankruptcy. Netflix and the new technology had vanquished Blockbuster and the old (O'Neill 2011).

<sup>&</sup>lt;sup>2</sup> Sharkey (1982) observed in the classic textbook that the Bertrand game, in its prediction that the perfectly competitive outcome emerges with only two competitors, is extreme.

market, as shown by the Netflix-Blockbuster episode, while the others go bankrupt. But the incentive to collude or cartelize is also much stronger and, indeed, many collusive arrangements may be induced by the threat of a "cutthroat competition." It is well known that John Pierpont Morgan and the Moore Brothers of Chicago forced many independent steelmakers to join a steel cartel by threatening a price war and other tactics against non-joiners (Tarbell 1936). At that time, despite the Sherman Anti-Trust Act, there was still no dedicated antitrust agency to actively prosecute anti-competitive mergers and cartels.

The Gilded Age of the United States (1878–1898) was largely characterized by laissez-faire economics where the doctrine, "the government governs best that governs least," held sway (see, e.g., Garvey and Garvey 1990). This allowed businesses to form cartels that maximized firm profit at the expense of consumers as given by the welfare outcome in Figure 1.2.³ American businesses responded to laissez-faire governance by sponsoring collusive organizations called trusts (e.g., sugar trust, oil trust, coir trust, etc.). To protect consumers against exploitation by trusts, the Sherman Anti-Trust Law was finally passed by the US Congress in 1890. But it was not until the passage of the Clayton Act and its companion Federal Trade Commission Act in 1914 that antitrust was pursued in earnest.

Under Bertrand competition, the formation of trusts and combinations is rendered more likely. Thus, the PCC's role, which ebbs under Bertrand competition, resurfaces as antitrust: the prosecution and break-up of cartels provided for in the PCA.

<sup>&</sup>lt;sup>3</sup> Cartels and pools were rationalized as a way to avoid disastrous and disruptive price wars consequent to overproduction (Tarbell 1936) that resulted in bankruptcies and labor dislocation.



3

# Competing Philosophies: Structure versus Consequence

Having touched on the Schumpeterian competition and innovation paradigm, we complete the picture by bringing into focus the various competition policy philosophies. The three competing philosophies in competition policy are Structure, Conduct, Performance (SCP) on the one hand, and the Chicago School Tradition (CST) and Evolutionary-Schumpeterian (ES) School on the other.

#### Structure, Conduct, Performance (SCP)

The SCP claims that performance (profitability) is determined by structure (if industry structure is competitive, profit will be determined by MC = price; if monopolistic, profit will flow from MR = MC) which drives conduct. There is causative relation going from structure to conduct to profitability. From the series of figures in Chapter 1 (see Figures 1.2 through 1.5), the consumer's surplus is monotonic increasing in the number of players in the market. The mantra then was, "get the market structure right." This calls for reducing "market concentration" that underlies abuse of dominant position. The mandate for a competition agency is "defend competition." This viewpoint is sometimes known as the *Bain doctrine*, after economist Joe Bain from Harvard University, who focused on structure. Since, as the label goes, structure drives everything, this view is structuralist (Garvey and Garvey 1990).

From this, it is a small step towards per se rules on concentration—rules that specify "market share thresholds" beyond which the firm is presumed ipso facto guilty of abuse of dominant position. A per se rule may read "not more than 50% market share," i.e., if you have 51% of market share you are, ipso facto, in violation and subject to legal sanctions. More telling, the burden of proof is on the presumed violating firm. Yet another per se rule may be " $n \ge n^0$  is healthy,  $n < n^0$  is unhealthy." The "Jeffersonian

ideal" of numerous small, independent producers becomes the goal as opposed to the Hamiltonian ethic of economic efficiency (Garvey and Garvey 1990). In contrast to the structuralist viewpoint are the consequentialist philosophies.

#### The Chicago School Tradition (CST)

This championed the idea that consumer surplus is the ultimate object of any state action in the market (Alchian 1950; Stigler 1971; Posner 1974; Bork 1978; Garvey and Garvey 1990). In the true tradition of the economics discipline, the CST is consequentialist: the welfare consequence to the consumer is paramount. The social optimum can be served by different structures given different circumstances. It denied the claim that market performance (profitability) is necessarily related to market conduct (predatory behavior) or that market dominance leads directly to its abuse. A firm may be dominant and highly profitable because of its technological prowess, as exemplified by microchip maker Intel, whose slogan "Intel Inside" is ubiquitous, but whose dominance is attributed to technical innovation. CST considered as facile the identification of rising efficiency with the rising number of rivals. A dominant firm may advance consumer surplus if it is attained and sustained by technical advances that lower cost.

#### The Evolutionary-Schumpeterian (ES) School

The Schumpeterian view of dynamic efficiency (Metcalfe 1998; Metcalfe et al. 2004) is also consequentialist, but it adopts the Schumpeterian embrace of entrepreneurship and innovation as the wellspring of progress. Innovation in particular requires capital investment to engender, and larger firms are in better position to finance R&D systems (Baker 2003). Large pharmaceutical companies spend billions of dollars to develop and market game-changing drugs. This they will not do if they are not extended protection by patents. Thus considerable profit may be had, but as Metcalfe and Ramlogan (2007) observe, the profit may not be the result of market power but of superior competitive advantage (technology) and/or superior business knowledge. Evidence shows that while radical (especially product) innovations are associated with small start-ups (the folkloric garage innovator), the bulk (75%) of incremental innovations are engendered by large firms. In many LDCs, moreover, technical advances are accessed piggy-backed on new fixed capital equipment financed by investment. A duopoly may be more efficient than an oligopoly if the larger rents received by the duopolists are plowed back into new investments and R&D which lowers the average cost.

The world has retreated from the Bain's doctrine which dominated the mid-20th century leading to the breakup of Ma Bell into several Baby Bells. The Chicago School Tradition and the Evolutionary-Schumpeterian view have replaced the Bain's doctrine

at the head of the table. Moreover, the burden of proof is now partly on the aggrieved parties—the victims of anti-competitive behavior should show cause. Reasonable market dominance is given a wide berth. The message they convey is the need for considerable forbearance for firm size that is defensible on efficiency grounds. There is greater scope for the rule of reason.2

<sup>&</sup>lt;sup>1</sup> Thus Intel, which has a dominant position in microchips (~70% market share), has been spared from antitrust lawsuits.

<sup>&</sup>lt;sup>2</sup> The so-called East Asian exceptionalism, especially in its nurture of and tolerance for large interconnected corporations (i.e., chaebols in South Korea, the zaibatzus and keiretsus in Japan), is better understood and appreciated from the two consequentialist viewpoints rather from the structuralist one.



4

### Relevant Market

The PCC shall be asked to evaluate complaints of abuse of market power in different markets. To render a proper judgment, it must carefully study the details of each market to isolate the effect of abuse of market power from those of extraneous factors. In other words, it may need in-depth studies not offered here. We, however, highlight some general relevant market issues in this chapter.

#### Small markets and N-poly viability

The discussion of Bertrand competition shows that to properly deal with market failures from abuse of market power, it is important to ascertain the nature of the relevant market under scrutiny. As argued above, a duopoly is not a market failure under Bertrand, while the same duopoly remains a market failure under Cournot competition.

The Philippines is archipelagic, and as such, many far-flung markets are isolated and small. If they are not missing, their capacity to support competition may be limited. This is the concept of N-poly viability of markets (Fabella 2015). Some markets may be unable to support even one firm given the fixed cost requirement of production; these are called "missing markets." Some small markets may be capable of supporting no more than one firm, again *given the fixed cost requirement*; that is, it is a monopoly-viable market. A duopoly in the same market will not survive unless fixed capital is reduced by technology. A duopoly-viable market will not support a third firm; consolidation will return the number to two. When the fixed cost requirement is very small, the market becomes N-poly viable, N large. A proven N-viable market being served by (N-1) firms would mean some deadweight loss and is a signal for PCC to scrutinize. N

<sup>&</sup>lt;sup>1</sup> Take for example Tagbilaran, Bohol. In 2016, it is being served by only one mall. One can ask: Is this because there are barriers to entry or is it because Tagbilaran is a small market and is single-mall viable?

#### Imperfect substitutes to the output of a monopoly

Imperfect substitutes are usually modeled by a two-good Bertrand duopoly. Here, we deem it best for comparability with results above to employ (following Fabella 2017) a Cournot duopoly where the output of one firm is an imperfect substitute of one's own. The total supply in the market is, from the viewpoint of Firm 1, not  $q = (q_1 + q_2)$  but  $q^{\wedge} = (q_1 + \delta q_1), \ 0 \le \delta \le 1$ , the degree of substitutability, and  $q^{\wedge} = (\delta q_1 + q_2)$  from the viewpoint of Firm 2. The symmetric Cournot competitive equilibrium output of this game is:2

$$q^{di} = [(a - c)/b(2 + \delta)].$$

The superscript *di* of *q* represents duopoly with imperfect substitute.

Note that:

$$q^m \ge q^{di} \ge q^d$$
.

The firm output in this imperfect substitute Cournot game is intermediate between the monopoly output  $q^m = [(a-c)/2b], \delta = 0$  (zero substitution), and the duopoly output  $q^d = [(a-c)/3b], \delta = 1$  (perfect substitution). As intuition would have it, the degree of relief to consumers from monopoly power depends upon the degree of substitutability  $\delta$ ,  $0 \le \delta \le 1$ , between  $q_1$  and  $q_2$ . The closer  $\delta$  is to 1, the lower is the price relative to the monopoly price and the closer it is to the duopoly price, both featured in Figure 1.3, and the farther removed from monopoly price.

Awareness of the presence or otherwise of imperfect substitutes and the degree of substitution is important for the PCC to determine the social cost of an extant monopoly and the urgency of dealing with it.

#### Fragmented markets and integration

Many times, high prices and/or unstable supply are reflexively blamed on abuse of market power. It may happen that these are due instead to the smallness of markets and/ or to non-integration of markets. We have dealt with smallness of markets above. We deal with fragmentation here. Non-integration results in small markets which enables market dominance and abuse. In other words, market dominance and its abuse may be a result of non-integration of markets rather than its cause. Suppose two identical

The profit functions of Firm 1 and Firm 2 are, respectively:  $\pi_1 = [a - b(q_1 + \delta q_2)]q_1 - cq_1$  and  $\pi_2 = [a - b(q_1 + \delta q_2)]q_1 - cq_2$  $(\delta q_1 + q_2)]q_2 - cq_2$ . The first order conditions under Cournot assumption are:  $a - 2bq_1 - b\delta q_2 - c = 0$  and  $a - 2b\delta q_1 - bq_2 - c = 0$ . Assuming symmetry,  $q_1^* = q_2^* = q^{di}$  = we have from either:  $q^{di} = [(a - c)/b(2 + \delta)]$ as claimed in the text.

markets are each monopoly-viable and are separated by a natural barrier, say, a body of water. This situation cannot be fixed by forcing entry into each of the markets since monopoly-viability resists entry by definition. Thus, the proscriptive instruments of PCC will not work.

But advocative competition policy as opposed to a proscriptive one can fix the failure. Suppose it is possible to integrate the two markets, say, by a bridge or by any lower cost conveyance. If integration of the two markets is attained by such a bridge, the market is suddenly twice as big and price drops by market size effect alone. This effect holds even if the two firms merge post-integration to form a single monopoly in the larger integrated market. The price will be even lower if the two firms compete as duopolists post-integration (see Fabella 2015). Thus, market integration is always consumer welfare-improving. PCC should be prepared to advocate such integration. Box 2 (below) gives examples of pro-competitive advocacies that the PCC may embrace.

The pro-competitive advocacy remains valid if the integration is imperfect, i.e., the erected bridge is narrow and passage is costly. Here is one salient difference between Competition Law and Competition Policy: the Philippine Competition Act (PCA) is largely proscriptive and does not mandate pro-competitive advocacy for PCC; but because initiatives such as market integration and RCOA enhance competition leading to lower price and stable supply, PCC should weigh in as amicus curiae on such issues

#### BOX 2

# Advocative competition policy

For example, the Mindanao Island power market is completely isolated from the Luzon-Visayas power markets while the Luzon power market is only imperfectly integrated with the Visayas power market because the submarine cable is capacity-constrained. Integrating the three markets by an adequate submarine cable connection will lower the price and improve stability of power supply in the three markets. As such, PCC may be interested in advocating this type of integration. Another procompetitive advocacy is the completion of RCOA (Retail Competition and Open Access) in EPIRA. Presently, consumer contestability starts at one megawatt of power. This is slated to be lowered to 750 and 500 kilowatt-hours (kwh). The choice will allow currently captured consumers to choose their power supplier and force distributors to become more efficient or be abandoned by consumers. Speedy implementation of RCOA is worth the support of PCC.

as a matter of policy. In general, PCC should weigh in on all policies with competitive implication, whether advocative or proscriptive.

# State-enabled market dominance and competitive non-neutrality

The understanding in the post-World War II period was that in developing (as well as developed) countries, economic development cannot be left to undeveloped capital and factor markets, so the state must lead the way through picking winners, rules of entry, administrative guidance, or even ownership. The Import Substitution Era attracted investments towards supplying domestic demand made attractive by limiting or preventing competition from abroad via import bans, quotas, and high tariffs on imports. With high tariffs, the foreign investors came to sell to the domestic market and earned the moniker "tariff jumpers." The number of competitors in the domestic market was limited by entry barriers to foster rapid acquisition of capacity and scale. In many instances prior to the 1990s, the provision of many goods and basic services were pursued through direct ownership (e.g., water and sewerage service, state-owned generation and transmission, the Oil Price Stabilization Fund (OPSF), the National Food Authority (NFA), state monopoly on sugar trading, coconut/copra trading, and the Sugar Regulatory Administration (SRA)) or state-enabled monopolies (say, PLDT in telecommunications and Philippine Airlines (PAL) in air services, etc.). These invariably involved anti-competitive restrictions.

The legal franchise unsupported by scale economies constitutes the extreme form of what is known as 'competitive non-neutrality.' Not only are other private players disadvantaged, they are not allowed entry at all. Other cases of competitive nonneutrality are more subtle. The by-product constraints emanating from the mandated five-hectare ownership ceiling and limited tradability of land assets in the farm sector is an example. Because of the obligation to maintain financial viability, formal sector financial institutions do not lend nearly enough to agriculture, especially small borrowers who, as a group, have become the preserve of informal lenders who charge exorbitant interest rates and leave a trail of poverty (see, e.g., Fabella 2014a; Chikiamco 2017). These by-product constraints effectively discriminate against formal lenders and starve farmers of formal banking resources. Lifting the by-product constraints will open the door for formal lenders.

Competitive non-neutrality also figures in the case of the state-owned Philippine Ports Authority (PPA). By law, PPA is at once a state enterprise and a regulatory agency. As an enterprise, it can own and operate port assets. As regulator, it oversees all ports, private or public, and issues permits for construction, operation to all the ports, and approves tariff setting. PPA refused permission to the private firm Harbour Centre Port Terminal, Inc. (HCPTI) to handle foreign "containerized" cargo because it would compete with the PPA-owned South Harbor Port of Manila, a clear instance

#### **BOX 3**

# Philippine Ports Authority (PPA)

When in 2004 the Philippine Ports Authority (PPA), which had monopoly over cargo handling in Manila ports, was prevailed upon to grant a private group Harbour Centre Port Terminal Inc. (HCPTI) permission to handle foreign "non-containerized" cargo, close to 70% of the market segment shifted to HCPTI due to better and cheaper service, showing that previous refusal was costing the public (Basilio 2011). The second player gave shippers an option. The PPA still has refused to give up its monopoly over "containerized cargo" handling.

of competitive non-neutrality. As observed in Box 3 (above), when in 2004 PPA gave HCPTI permission to handle foreign "non-containerized" cargo, close to 70% of the market segment shifted to HCPTI (Basilio 2011). This suggests that refusal in the case of foreign containerized cargo must be costing the public as well. Competitive neutrality dictates that PPA connected ports should not enjoy undue advantage.



5

# Missing Markets, Industrial Policy, and Institutions

It is now a canonical observation that the East Asian miracle economies made little use of competition policy in their post-World War II catch-up decades (Lin 2005; Singh 2006). If we take the East Asian miracle economies as models why then do we need competition policy? Why not adopt the industrial policy in the form of "administrative guidance" and further down of "picking winners?" It is true that many East Asian miracle economies subordinated competition policy to other goals, such as capacity building both quantitatively and qualitatively and rapid investments in their catch-up period. They dangled cheap credit, favorable tax treatments and, yes, entry barriers as incentives for pioneer firms and to hasten the buildup of size and cost competitiveness associated (CUTS 2003; Brooks 2005). The rationale for industrial policy is the view of development as structural transformation which cannot be effected without purposeful action by the state commonly imbedded in industrial policy. The market alone may not be able to overcome the coordination failures and inertia of path dependence that stand in the way of structural transformation (Hausmann and Rodrik 2006; Brooks 2007).

But Japan and South Korea also fostered intense domestic competition among the big businesses they nurtured to compete globally. There are ways to reconcile a "soft" flavor of industrial policy with competition policy, such as explicitly imbedding developmental goals and dynamic efficiencies into the competition policy if not in the competition law of the nation (Evenett 2005). Indeed, we are guided by the Hausmann and Rodrik (2006) proposal of a soft industrial policy, one with an open architecture for industrial policy and which is agnostic to the sectors and activities benefited. Higher public spending on hard and soft infrastructure and on institutions that protect property rights and enforce contracts. The present work takes this view of an open architecture industrial policy as canonical especially in view of a consideration salient in the Philippines.

It is of general acceptance that the East Asian miracle economies like Taiwan and South Korea had comparatively strong institutions in the post-World War II period. The role of strong institutions in making hard and narrow architecture industrial policy work cannot be gainsaid. The strong industrial measures adopted in these countries were prevented from being turned into rent-seeking satraps by institutions that can resist political meddling. Strong industrial policies such as picking winners also create substantial potential rents that can overwhelm the integrity of weaker governance.

The East Asian exceptionalism in strong interventions is not an industrial policy story; it is rather an Acemoglu-Robinson-North story of strong institutions. Countries with weak institutions are well advised to enlist open architecture industrial policy and market competition to impress discipline and innovation among its firms.

# Missing markets

One development goal that may be imbedded in competition policy at the outset is addressing missing markets. Many times, addressing missing markets is facilitated by extending a franchise to induce entry. The use of mandated monopolies is common in the early part of the development cycle when markets are small, unviable, and may be missing. Granting private players who otherwise will not enter an unviable market a long-term franchise, say 25 years, is a quasi-competitive strategy (Fabella, Balisacan, and Quimbo 2017), that is, advancing consumer welfare even while restricting competition. The firm loses money in the first few years of operation but recoups in the remaining years when the market has become viable. The franchise is a substitute for direct subsidy or direct provision by the state. Regulation is employed to discipline the franchisees. In a similar manner, during the catch-up period of the East Asian miracle economies, the seemingly anti-competitive franchises or guarantees for entrants were also used to address the small (relative to global counterparts but not necessarily missing) market problem. Administrative guidance, a form of regulation, was employed to keep the favored firms on track, rather than go off in pursuit of privatizable rents.

In jurisdictions where institutions are weak, these anti-competitive mandates became extended long after their usefulness has expired (since the market has grown and become viable for more firms). In countries with strong institutions, the change in viability of markets is recognized and appropriate replacements are adopted so that efficiency is maintained or improved. Markets have different viabilities, depending upon the fixed capital requirement (see Fabella 2015)—some markets can support only one firm; others are big enough to support more firms; still others are missing (unviable). Suppose a market is unviable (a missing market) given capital requirement. For a firm to operate in the jurisdiction, the firm must be subsidized; the subsidy can be instanced by a long-term franchise as explained above. In time, the market grows

to a size able to support two firms at the same fixed capital cost. We say that the monopoly-viable market graduates to a duopoly-viability. Maintaining the franchise of the monopoly in a market that has become duopoly-viable will cost the economy more and more. An alternative is to lift the franchise with appropriate compensation to the franchise holder. The higher flow of social welfare from the duopoly or oligopoly versus from the monopoly will eventually cover the compensation. This welfare raising shift to a duopoly will however involve considerable transactions cost and in weak governance environment, the potential welfare gain may be eaten up by competitive lobbying and transactions cost, including corruption, so the shift never comes.

Industrial policy and its handmaiden administrative guidance are "strong regulatory interventions" into the market space. Strong regulatory interventions rooted on economies of scale and learning-by-doing have very high upside growth potential in developing economies if and only if they are kept along the straight and narrow by strong institutions and upright implementation. This is because—as already observed in the process, they also create very large privatizable rents for the bureaucrats who administer these interventions. The considerable powers given to state organs and bureaucrats by strong interventions exert very strong temptation to corruption and rent seeking. The East Asian miracle economies were known to already have relatively strong institutions to effectively administer their regime of strong interventions.

If institutions are however weak, strong regulatory interventions in favor of some market players quickly deteriorate into an orgy of corruption. Bankruptcies and white elephants are the familiar harvest of ambitious policies that substitute administrative guidance for market incentives under weak institutions. Economies with weak institutions are thus well-advised to face the fact of institutional frailties and to enlist the market itself to help discipline its firms towards efficient operation. This hybrid strategy is also figured in the careers of the East Asian miracle economies.

This may well have happened in the Philippines under import substitution when the most powerful and far-reaching industry that emerged as a result of strong industrial policy was smuggling to profit from abnormally high domestic prices consequent to the high protection. Every town then had a smuggler whose children had chiefs of police, mayors, and municipal council members as godfathers and protectors. The system of illegal payoffs went all the way up to the Congress as instanced by the infamous Lino Bocalan scandal in the 1960s (Hofileña 2009).1

<sup>&</sup>lt;sup>1</sup> Lino Bocalan was a Tanza, Cavite fisherman who found trawling for "blue seal" (smuggled) cigarettes more profitable than trawling for talakitok. He built a cigarette smuggling empire and paid off everyone who stood on his way. That rubber flipflops are still called smagol by the older generation in the Visayas is a legacy of those days when these, together with blue seal cigarettes, were illegally brought into the country via Borneo.

In the case of the import-substitution era in the Philippines, the immense privatizable rents from strong interventions simply overwhelmed the Philippines' weak institutions and turned them into conniving allies for institutionalized rent-seeking.

# Competition policy: Public-private partnerships and information asymmetry

The Philippine state's favored rampart against abuse of market failure throughout the post-World War II period was regulation. For example, so-called public utilities were subject to RORB (return-on-rate-base) regulation. The statutory limit was ten percent. As observed above, regulation as a form of strong intervention requires a strong enforcement institution to see to fruition. Regulation to implement properly requires substantial information in the hands of private players that the state may be unable to access. In weak institution jurisdictions, strong interventions become conduits for private interest to harvest for private gain. Regulation is more prone to the "truck and barter of rules." Competition policy, by contrast, is a form of armslength intervention that is less prone to capture. Once entry barriers are dismantled, the new entrants themselves become partners in monitoring dominant players and safeguarding the rules of engagement. By enabling entry or resisting cartels, PCC enlists, as it were, motivated third party allies, the private rivals, to discipline the dominant market players. These private allies play the role of alleviating the information asymmetry between the PCC and the dominant market players. It is a kind of PPP on the intervention space. Thus, competition policy has the added advantage of being less prone to vested interest capture and less saddled by information asymmetry.

#### Rational forbearance for size under weak institutions

"Trust busting" was the phrase synonymous with the Sherman Anti-Trust Act. The "trusts" that were very visible and considered most inimical to consumer welfare were most often horizontal combinations (Tarbell 1936). Carnegie Steel was the exception; it was large but it attained its size largely by internal growth through vertical integration and cost cutting. In developing areas with weak institutions and high risk of ex-post opportunism, enterprises can attain size by vertical integration for which there are many reasons. The most familiar are imperfect capital markets and undeveloped factor markets. Size grows because firms unable to access factors of production (capital and intermediate inputs) from underdeveloped markets must insource the same. The less developed the markets, the more vertically integrated are firms. Of course, allowing imports of capital and intermediate inputs can alleviate this trend.

But another reason for vertical integration becomes salient under weak institutions. In-sourcing acts as a cover against ex-post opportunism in markets where contract enforcement is weak and costly. This derives from Coase (1937) who proposed that outsourcing or arms-length contracting as he called it could be costly with ex-post opportunism. This in-sourcing impulse tends to produce large connected firms such as conglomerates or taipans in many small economies. As institutions and markets improve, however, the need for such in-sourcing declines and out-sourcing or armslength contracting becomes attractive (see, e.g., Fabella 2007). This suggests that rational forbearance for firm size among regulatory authorities in weak institutions environment may make good economic sense.

# Other advantages of competition policy: Portfolio diversification and disaster risk reduction

In a country subject to climate catastrophes and where disaster risk is pronounced, more firms supplying the good q is less vulnerable to climate disruption and destruction of consumer's surplus than one firm, provided more firms mean more geographic dispersion of factories—a triopoly with more dispersed factories may be more resilient than a duopoly which, in turn, is less exposed to disruption than a single factory monopoly. Consider a heavy rainfall which floods and disables one firm's factory. In a monopoly, this is catastrophic—no q is produced and consumer welfare drops from the yellow triangle in Figure 1.2 to zero, the consumer's surplus of a missing market. If the status quo is a spatial duopoly, the flooding of one firm's factory reduces the consumer welfare from the yellow triangle in Figure 1.3 to the smaller but non-zero yellow triangle in Figure 1.2. With a triopoly status quo in Figure 1.5, the disabling of one firm's factory results in a smaller loss to consumer in Figure 1.4. The more firms there are and representing greater dispersion of physical assets, the more disaster-resistant is the supply of q and the better for the consumers. This portfolio diversification advantage extends to financial disasters: if a large monopoly runs into financial trouble, the whole market supply may be endangered; not so if one firm in an oligopoly runs into a financial trouble.



6

# Evidence: Productivity, Innovation, and Foreign Direct Investment

That greater competition goes hand-in-hand with faster productivity growth and innovation has been confirmed in a wide range of empirical studies: on an industry-by-industry, or a firm-by-firm basis and using different measures of competitiveness. That the existence of competition law and especially of a dedicated competition agency goes hand-in-hand with improved economic performance has also been supported by a number of studies. We limit our survey to the effect of greater competition on total factor productivity, innovation, growth, and direct foreign investment. We will thus simply give the flavor and will eschew being exhaustive.

# Total factor productivity: Industry-level studies

Stephen Nickell (1996) shows that increased competition and a higher rate of total factor productivity growth are significantly associated. This seminal paper finds that higher competition measured by various industry-level measures of competition is statistically significantly associated with higher productivity growth. Nickell's results have been followed up. Disney, Haskell, and Heden (2003), using data on 140,000 separate businesses, conclude that more market competition significantly associates with a higher level and higher growth of productivity. Blundell, Griffith, and Van Reenen (1999) also find a positive effect of product market competition on productivity growth using a data set on UK manufacturing firms. In a survey of 500 German firms, Januszewski et al. (2002) report a positive link between productivity growth and competition. There are many reasons why this is so: managers work harder (tested empirically for the UK and Germany by Köke and Renneboog (2005)); likewise, several papers by Bloom and Van Reenen (e.g., 2007) show that low productivity economies exhibit a larger

clutch of firms that are very badly managed (by their scores) and that product market competition helps whittle down this clutch. They either exit the market or shape up to survive. Bloom and Van Reenen conclude, "We find that poor management practices are more prevalent when product market competition is weak ..." (also quoted in OECD Factsheet 2014, 12).

These results show that greater competition spawns more nimble and efficient firms which push out or force improvements on inefficient laggards (OECD 2014).

#### Innovation

It is now an established canon that firms facing competitive rivals will innovate more than firms untouched by such rivalry. The relationship may be non-linear: moderately competitive markets may innovate more than both monopoly and excessively competitive markets. This is the inverted U hypothesis largely associated with Schumpeter (1942) and Scherer (1967). The empirical evidence is provided by Aghion and colleagues (2004) who use the Lerner Index as measure of competition and patents as the measure of innovation. The lower the cost price margin is, the more competitive is the industry. The rationale is that laggard firms have every incentive to catch up with the leaders at low competition levels; industries with low competition have a neckand-neck race property inciting the positive gradient segment of the inverted U; more competition results in more innovation. But as competition with the technological leaders tend to whittle the profits of such innovation, laggards refrain from innovating. More competition means less innovation.

#### Growth and competition law

Gutmann and Voigt (2014) analyze the experience of 179 countries from 1971 to 2012. They ask the question: Does the presence of competition law and the time since introduction have any explanatory power on growth rates, FDI and productivity? Their log frame is as follows: the introduction of a competition law should improve the dynamic efficiency of an economy which should improve its growth rate. Their evidence shows that a substantial two- to three-percent bump in the annual growth rate results.

Dutz and Hayri (1999) find a positive link between measures of competition law effectiveness and GDP growth using a cross-section of 52 countries. Clougherty (2010) finds a relationship between funding as a proxy of a country's commitment to competition policy and economic growth (see also OECD Factsheet 2014).

The empirical literature on the relationship between market competitiveness and productivity, innovation and growth is very extensive (see OECD Factsheet 2014). Our purpose is just to give the flavor of these multi-storied relationships.

### Foreign investment and competition law

Countries with designs on improving their investment rate through inward direct foreign investment are advised to enact and enforce a competition law in keeping with global standards. This is the message of Clarke (2011) who investigated the relationship between a binomial measure of the existence of a competition law (indicating whether the country had enacted and enforced competition law within the previous twelve months) and the log of inward foreign direct investment received as a percentage of GDP (LogFDI) using cross developing country data from 1985 to 2000. Controls consisted of variables such as openness, area dummies, and distance from markets. The random effects generalized least squares (GLS) regression showed a very strong positive correlation between FDI and the enactment and enforcement of competition law. Other regressions as robustness tests give the same message. Countries trying to attract foreign investment are well advised to enact and enforce an acceptable competition law. Foreign investors tend to view competition law and associated competition agency as proxy for good rule of law and reduced investment risk, and this loosens the purse strings.



7

# "Bang-for-the-Buck" in PCC Decision Making

Every competition agency has limited resources and must therefore choose its battles with care. Bang-for-the-buck is the overarching principle here. Bang-for-the-buck in competitiveness of the Philippines is one goal worthy of pursuit. Bang-for-the-buck in poverty reduction is another. Policy initiatives that shoot these two birds at once are even more compelling. Let us begin with choice of sectors to emphasize.

#### Sectoral choice

Non-tradable versus tradable goods sector

The competitiveness of the Philippines is reckoned by how the tradable goods sector (i.e., manufacturing, agriculture, and tradable services) perform against their global counterparts. Since the Philippine economy is to a great extent open (only a few commodities still remain under quantitative restrictions such as rice and sugar), the manufacturing and agricultural sector is already subject to global market discipline through imports of goods. Abuse of market power through high prices is curbed directly by imports. The liberalized imports regime acts as automatic threat to price gauging by dominant players.

The non-traded goods sector is different. They do not compete with imports from abroad but only with their domestic rivals. There is no automatic external pushback to abuse of dominance. Thus, PCC needs to pay greater attention to the non-traded goods sectors. Not only will consumers benefit but also the competitiveness of the traded goods sector. Manufacturing depends heavily on ancillary non-traded services such as power, logistics, transportation, telecommunications, and human capital, among others. If these ancillary services sectors are inefficient and have high cost, the tradable goods sector, especially manufacturing, will also be dragged down. Thus,

greater attention should be given to abuse of market dominance in these ancillary services sectors and less to the same issue in the tradable sector. This impetus given to manufacturing by the improved non-traded goods sector not only advances consumer welfare through lower prices but more importantly consumer welfare through greater employment creation and poverty reduction.

## Manufacturing and poverty reduction

Among the traded goods sector, the manufacturing sector has pride of place. Competition policy insofar as it renders the non-traded goods sector more efficient will render the Manufacturing sector more robust. An example is the role of power prices in the health of Manufacturing. Daway et al. (2016) show that for low income countries (≤ USD 10,000), the industrial price of electricity which proxies for other non-traded goods inputs is a robust negative influence on the share of manufacturing in GDP; they further show that the manufacturing sector in the Philippines offers higher wages and more stable jobs and hires more workers from poor households among the other large sectors. The indirect impact of competition policy on a more robust manufacturing sector promises a strong boost to poverty reduction. The poverty reduction impact of manufacturing is explored by Daway, Ducanes, and Fabella (2017) for the same low income country data. We reproduce their system generalized method of moments (GMM) regression results in Table 7.1 (on the opposite page).

What do we learn from the evidence in Table 7.1? Firstly, manufacturing size (share of manufacturing sector in GDP) is a robust negative correlate of both poverty headcount ratio and poverty intensity. Secondly, that services size (share of services sector in GDP) is a robust positive correlate of poverty headcount measure and poverty intensity. When the manufacturing sector is growing faster than the services sector, we have what we call quality growth as opposed to just quantity growth (growth of GNP). Quality growth, when quantity growth is led by the non-traded goods sector, has an additional poverty-reduction effect which pure quantity growth alone may not exhibit.

The rise in the share of the services sector has two effects on poverty reduction: the positive impulse via the substitution effect (non-traded goods substitute for traded goods through competition for scarce capital) and the negative impulse via the complementary effect by boosting the more pro-poor manufacturing sector. In low income capital scarce economies, the negative substitution effect overcomes the positive complementary effect (see Daway, Ducanes, and Fabella 2017). Thus, the PCC in its pursuit of a more competitive and efficient traded goods sector will hasten poverty reduction via a more dynamic manufacturing sector. This has implications for the role of PCC vis-à-vis the manufacturing sector: first a forbearance for size in the sector itself (much along the lines of consolidation in the Banking sector being pursued

TABLE 7.1 • Poverty gap, poverty head count ratio, and manufacturing share

	System GMM				
	Povert	y gap	Poverty headcount ratio		
	USD 1.9/day	USD 3.1/day	USD 1.9/day	USD 3.1/day	
	1	2	3	4	
Poverty measure (–1)	0.528 [0.010]***	0.685 [0.011]***	0.724 [0.012]***	0.872 [0.010]***	
Manufacturing size	-0.063 [0.022]***	-0.077 [0.029]**	-0.155 [0.036]***	-0.059 [0.035]*	
Services size	0.106 [0.009]***	0.145 [0.013]***	0.192 [0.033]***	0.262 [0.025]***	
ICRG	-0.042 [0.008]***	-0.096 [0.006]***	-0.106 [0.012]***	-0.258 [0.013]***	
Real GNI per capita	-0.001 [0.000]***	-0.001 [0.000]***	-0.001 [0.000]***	-0.001 [0.000]***	
Number of observations	195	195	195	195	
Number of countries	65	65	65	65	
AR(2) Arellano-Bond test	0.753	0.715	0.419	0.423	
Hansen p-test	0.477	0.54	0.54	0.582	
Number of instruments	64	64	64	64	

#### Notes:

- · Robust standard errors in brackets
- \* = significant at 10%; \*\* = significant at 5%; \*\*\* = significant at 1%
- · ICRG stands for the International Country Risk Guide. Period 2 to Period 6 dummies are also included in the above regressions but are omitted from the table.

Source: Daway, Ducanes, and Fabella 2017

by the Bangko Sentral ng Pilipinas) and, second, enhancing greater competition in services sectors ancillary to Manufacturing to lower cost such as that of power and logistics. This would then constitute another positive competition advocacy of PCC.

Agriculture: Poverty and by-product barriers to entry

The result above can be extended to the agriculture sector. Agriculture is also a traded goods sector and subject to discipline by imports except in certain import-controlled commodities (e.g., rice and sugar). The agricultural sector together with the fisheries sector also hosts the largest number of households below the poverty line. Growth in agricultural output will translate into substantial reduction in poverty incidence. The hurdles faced by manufacturing also hamstring agriculture.

But Philippine agriculture has special problems associated with government mandated anti-competitive rules. What are the biggest obstacles to growth and poverty alleviation in agriculture? The usual mantra is lack of farm-to-market roads, lack of irrigation assets, lack of fertilizer, and lack of seeds, among others. But a good deal of these deficits flow from crop loan financing deficit. Most of crop loan financing in agriculture is accessed from the informal underground lenders where the interest rate is exorbitant. The formal financial/banking sector whose loan rate offer is multiples lower than that of the informal sector has excess agri-agra program funds for which they prefer to pay stiff penalties rather than lend to farmers. This is because formal sector lenders have fiduciary obligations for which they are answerable to the BSP. They cannot, for example, incur excessive risk associated with small borrowers. Lending to very small farmers involves too much risk unless the loan is covered by collateral. The collateral system is recognized as a Stiglitz-Weiss instrument against asymmetric information failure even in developed countries. But in most of Philippine farms covered by the Comprehensive Agrarian Reform Program (CARP), awarded land is inalienable and thus cannot be used as collateral. Likewise, the ownership of farm land is subject to a five-hectare ceiling resulting in the rural lender's resorting to underground modalities. The average farm size is now at or below one hectare. Moreover, land assets cannot be traded until and after some very stringent hurdles. With the market for land rental gone underground, the market for credit has also gone underground where the interest rate as observed is prohibitive. The formal banking sector which can offer low interest loans are conspicuously absent in the rural credit market. The reason for their absence is a by-product entry barrier: while they are not prohibited from lending in the rural sector, they go elsewhere because the five-hectare ceiling and the absence of the formal land market mean they cannot foreclose upon default and forced to violate their fiduciary obligation. The entry barrier is a by-product of the five-hectare ownership ceiling and the non-tradability of land assets.

This violates another canon of competition policy as alluded to earlier: competitive neutrality. This requires that both formal and non-formal lenders must be able to compete on equal footing in the farm credit market. Instead, the farm sector has become a preserve of informal lenders. To break the stranglehold of the informal lenders, the by-product barriers to entry (five hectares ceiling and non-tradability of land assets) must be lifted allowing larger and more economically viable farm sizes and attracting entry of private capital and of the formal financial sector in the rural credit market. The lifting of these hurdles will also reverse the flight of private capital which is the permanent fixture in our agricultural landscape since the 1980s. The PCC can make a substantial dent on poverty reduction if it endeavors to and succeeds in lifting these by-product entry barriers that have put Philippine agriculture in a straitjacket.

Import monopolies in NFA and SRA: Competitive non-neutrality

There are extant state-mandated monopolies in agriculture. Such are the rice import monopoly via licensing power held by the National Food Authority (NFA) and the Sugar Regulatory Agency (SRA). Competitive neutrality is violated in the NFA case. In the 2002 State of the Nation Address of then President Gloria Arroyo, she stated that the private sector will henceforth be allowed to import rice provided the 50% tariff is paid. Import quotas were allocated for the private sector. The government ostensibly withdrew the import tariff-free privilege of NFA. But the private sector response was anemic. Why? The quotas were small, the 50% tariff meant no profit could be realized given that the government effectively waived the tariffs on NFA imports and NFA rice effectively was subsidized (Tolentino 2011). The liberalization was bogus, and private sector importers sensing the ruse refused to play. Competitive non-neutrality in favor of NFA was preserved.

The import monopolies can well be scrapped and left to private importers. This has fortunately come to pass. In February 14, 2019, President Rodrigo Duterte signed into law the Rice Tariffication Act (RA 11203) which replaced the quantitative restrictions administered by the National Food Authority with import tariffs. This means rice can now be imported by private entities that would only need to pay the mandated tariffs. This development is welcome and abolishes the corruption-ridden quantity controls.

#### Choice of cases

Optimizing the role of aggrieved parties

In view of limited resources, as regards the choice of cases to tackle, it is important that the PCC gives priority to cases brought to its attention by aggrieved parties ready to document abuses of market dominance. While PCC has the mandate to initiate cases motu proprio, aggrieved party initiated cases exploit the PPP character of competition policy and reduce the information asymmetry associated with these cases. Aggrieved parties can document the instances and the damage to themselves of abuse of market dominance. Furthermore, PCC cannot be accused of bias or hidden agenda on these latter cases, unlike in motu propio initiatives. Signaling the PCC's "aggrieved party proclivity" would also encourage the ventilation of grievances and serve as a reminder to dominant players to behave.

#### Verifiable undertakings in M&A

One of the most difficult tasks of the PCC is to properly cost-benefit analyze a proposed M&A project. There may be just too many dynamic unknowns in the pot. One way to ease the burden is to require verifiable undertaking(s) by the M&A players which, if violated, will automatically trigger a revisit and possible voiding of the merger. Take for example a quadripoly (four firms): tendered to PCC is an applications by the players to merge into just two firms resulting in a duopoly which would immediately reduce output (analogous to moving from Figure 1.4 to Figure 1.3 in Chapter 1). The applicants use as reason the ASEAN 2015 integration which would integrate market space in the ASEAN and thus require larger more competitive domestic players (a policy currently pursued by the BSP for banks). Evaluating the motives is not easy but PCC can require an undertaking by the merger-bound companies to maintain the output level (which we hope is observable) of the previous four separate firms and maintain the price in the domestic market.



8

# **Competition Policy Environment**

In this chapter, we briefly scan the universe of the competition policy environment consisting of the legal rules, the scope of their applications, and the institutions mandated to formulate and/or implement the rules in the Philippines.

# Competition policy environment

The competition policy environment in the Philippines is comprised of (1) the legal rules affecting competition in a market, and (2) the legal institutions creating and implementing those rules.

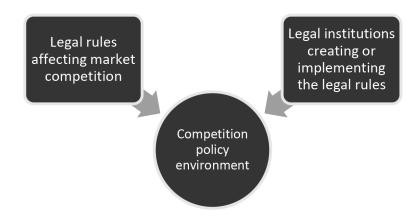


FIGURE 8.1 • Legal institutions and rules comprising the competition policy environment

In the course of the rapid review, the panel undertook to identify (1) the legal institutions and rules affecting competition, (2) the scope of legal authority of these institutions in creating and implementing the legal rules, and (3) the scope of application of these rules. Table 8.1 (on the opposite page) summarizes the legal institutions and rules affecting Philippine market competition, which may be classified into three types: (1) economy-wide; (2) sector-specific; and (3) geographyspecific.

#### The Constitution and the Filipino people

In their capacity as sovereign, the Filipino people are the source of the provisions included in the Philippine Constitution. In terms of scope, constitutional provisions apply to all sectors of the Philippine economy, except for provisions specific to certain sectors.

#### The Congress

Congress has created competition-related statutes that are (1) economy-wide, such as the Philippine Competition Act of 2015; (2) sector-specific, like the Electric Power Industry Reform Act of 2001; and (3) geography-specific, such as the Bases Conversion and Development Act of 1992. The legislative power is vested in Congress, and yet the President has exercised legislative power during certain periods in Philippine history.

#### Presidential issuances

The President may promulgate executive orders, administrative orders, proclamations, memorandum orders, memorandum circulars, and general or special orders (Chapter 2, Title I, Book III, Administrative Code of 1987). Presidential issuances affecting competition may be classified according to the scope of their application: (1) economywide, such as Executive Order No. 184 (2015) on the Foreign Investment Negative List; (2) sector-specific, like Executive Order No. 190 (2015) on duties on agricultural products; and (3) geography-specific, such as Proclamation No. 165 (2017) on a special economic zone.

#### **Treaties**

The Philippine President may enter into international agreements with other states and with international organizations. These agreements create legal rules in the Philippine legal system. An international agreement is either a treaty or an executive agreement (Executive Order No. 459, November 25, 1997). A treaty may modify the Philippine legal effect of an earlier statute.

TABLE 8.1 • Legal institutions and rules affecting Philippine market competition

Types of institutions	Institutions creating or implementing legal rules affecting competition	Form of legal rules created (Form of action when implementing legal rules)
Economy-wide institutions	Filipino people	Constitution
	Congress (Legislative department)	Statutes
	President (Executive department)	Presidential issuances, treaties, and executive agreements
	Philippine Competition Commission (Executive department)	Regulations (decisions, advisory opinions)
	Department of Justice (Executive department)	(Resolutions)
	Supreme Court and lower courts (Judicial department)	Rules of Court (decisions)
Sector-specific institutions	Executive agencies, including (1) departments and bureaus and (2) independent sector regulators	Regulations (decisions, permits)
Geography-specific	Local government units	Local ordinances (permits)
institutions	Special economic zone authorities	Regulations (permits)

The President has entered into treaties enhancing Philippine competition by eliminating non-tariff barriers and by requiring "most-favored-nation" (MFN) treatment and national treatment of imports. These treaties may be classified as (1) multilateral treaties, such as the Agreement Establishing the World Trade Organization (WTO); (2) regional treaties, such as the 1977 Agreement on the ASEAN Preferential Trading Arrangements; and (3) bilateral treaties, like the Philippines-Japan Economic Partnership Agreement (PJEPA or JPEPA).

#### Executive agreements

The President has also entered into executive agreements requiring the elimination of non-tariff barriers and the MFN and national treatment of imports. These include: (1) intra-ASEAN agreements, such as the 1992 Agreement on Common Effective Preferential Tariff Scheme for ASEAN Free Trade Area (AFTA); and (2) agreements among ASEAN members and those states considered as their major trading partners, such as the agreements on comprehensive economic cooperation signed with China and with India.

An executive agreement does not require the concurrence of the Senate (Executive Order No. 459, November 25, 1997). However, an executive agreement must conform to pre-existing statutes and cannot modify the effect of any statute.

#### The Philippine Competition Commission

Under the Philippine Competition Act of 2015 (PCA), PCC is the economy-wide agency mandated to create legal rules in the form of implementing regulations (Section 50) and implement the PCA and other competition laws (Sections 12(a) and 12(e)). Pursuant to its mandate, the PCC may issue binding decisions and advisory opinions (Sections 12(a) and 12(k)).

#### The Department of Justice

Under the PCA, the Department of Justice is tasked to help implement competitionrelated laws by (1) conducting a preliminary investigation on criminal violations of such laws, (2) issuing a resolution on whether a criminal information shall be filed, and (3) prosecuting the case in court once the information is filed (Sections 13 and 31, PCA).

#### The Supreme Court and lower courts

The Supreme Court may create legal rules affecting competition through its power to promulgate rules of judicial procedure (Section 5(5), Article VIII, Constitution). For example, it may designate competition courts and issue special rules of procedure for these courts.

Additionally, the Supreme Court and the lower courts are mandated to interpret and apply legal rules affecting competition, in relation to cases brought before them. Judicial decisions interpreting and applying constitutional and statutory provisions (Article 8, Civil Code) form part of the Philippine legal system. One example of a Supreme Court decision that affected Philippine market competition is Tatad v. Secretary of the Department of Energy (G.R. No. 124360, November 5, 1997), where the court found the existence of an oligopoly controlling the market for oil products and voided the first Downstream Oil Industry Deregulation Act (Republic Act No. 8180).

#### Executive agencies

Certain national government agencies in the Executive Department have been tasked by Congress to implement statutes pertaining to the sector they regulate, and to create legal rules for the effective implementation of these statutes. These agencies include: (1) executive departments and their bureaus, which are subject to the President's supervision and control (Section 38, Book IV, Administrative Code of 1987); and (2) sector regulators, which are attached to executive departments only for policy and program coordination (ibid.).

In implementing the statutes pertaining to their sector, executive agencies may take decisions for the effective regulation of private market players, and issue permits for such players to engage in regulated activities. Examples of statutes granting such competition-related powers are (1) the Revised Charter of the Philippine Ports Authority and (2) the Civil Aviation Authority Act of 2008.

#### Local government units

Local government units are authorized to create geography-specific rules in the form of local ordinances (Section 48, Local Government Code). These local ordinances may affect market competition in a geographic area. Further, a local government unit may regulate market activities by requiring business entities operating within its territorial jurisdiction to obtain business, sanitation, building inspection, and fire safety permits. Furthermore, the local government unit may prohibit certain business practices such as open pit mining.

#### Special economic zone authorities

Statutes providing for special economic zones affect market competition by giving fiscal and non-fiscal incentives to certain business entities. National government agencies administering special economic zones have the authority to (1) create geography-specific legal rules in the form of regulations applicable to their zone; and (2) implement the statutes and implementing rules for their zone. Additionally, these authorities issue permits to allow entities to perform regulated activities within their zone.

# Competition policy actions

Philippine legal rules have provided for four modes of competition-related policy actions by the government, which are summarized in Table 8.2 (on the next page).

#### Mode 1: Provision

Under normal conditions, the provision and sale of goods and services for the market is left to private market players. The Constitution recognizes the indispensable role of the private sector and encourages private enterprise (Section 20, Article II, 1987 Constitution). There are situations where the government's direct provision of goods

TABLE 8.2 •	Compotition	nolicy	actions	and	rolatod	iccunc
IADLE 0.2 °	Competition	DOILCA	dCtlOHS	dHU	reidieu	issues

Competition policy actions mandated by legal rules	Government market intervention	Issues
Provision	Government directly providing goods and services	<ul><li>Government-owned monopoly</li><li>Competitive neutrality</li></ul>
Protection	Government protecting favored market players	<ul> <li>Government-authorized private monopoly</li> <li>Regulatory barrier to entry of players</li> <li>Regulatory barrier to entry of products</li> <li>Preferential treatment of favored market players</li> </ul>
Regulation	Government prescribing the terms by which market players provide their goods and services	
Competition promotion	Government promoting the entry and expansion of identified market players	

and services will not adversely affect market competition, such as (1) when a good or service is provided as part of the government's social services, and is not sold; (2) when a good or service is not offered for sale, like law enforcement services; and (3) during abnormal conditions, like in times of natural disasters.

However, competition issues arise in other situations where the government directly provides goods and services for sale, including: (1) government-owned monopoly, where private market players are prevented by laws and regulations from competing with a government entity; and (2) situations where private market players are disadvantaged when competing with a government entity, thus raising issues on competitive neutrality.

#### Mode 2: Protection

One form of government protection is government-authorized private monopoly, where laws and regulations prevent new market players from competing with favored market players. A market player's authority to operate a private monopoly may be granted by the government through (1) a legislative franchise, or (2) an administrative franchise, including a public-private partnership (PPP) infrastructure contract.

Another form of protection is by imposing regulatory barriers to entry of players, such as nationality qualifications, which shield favored market players against competition. Despite their anti-competitive effects, regulatory barriers are often sought on grounds of national security, natural resource conservation, and other social objectives.

Other forms of protection are (i) regulatory barriers to entry of products, such as quantitative restrictions on imports; and (ii) preferential treatment of favored market players which gives them an undue advantage over their competitors.

#### Mode 3: Regulation

Regulation means that the legal rules prescribe, or authorize a government entity to prescribe, the terms by which market players shall offer their goods and services to consumers. Regulation may come in various forms, such as fixing or approving the toll or service rate, prescribing the product or service standards, determining the minimum qualifications and number of personnel, fixing the hours of operation, and providing for minimum amounts of investment.

#### Mode 4: Competition Promotion

The fourth mode of government policy action that affects market competition involves a government entity promoting the entry and expansion of rival market players, and regulating their anti-competitive behavior.

## Some key sectors

Below is a brief discussion of the legal rules and institutions that affect competition in some key sectors of the Philippine economy. Legal rules providing for direct provision of goods and services by government entities, and protection of favored market players, should be re-examined in the context of a national competition policy. Rules authorizing the regulation of market players should be reviewed to ensure better competition outcomes. Such a review should examine whether the regulator (1) has a clear role and no conflicting functions, (2) is independent and free from undue political or private influences, (3) has clear decision-making processes and governance structures, and (4) exercises transparency and accountability (OECD 2014).

#### Agriculture and fisheries

The Department of Agriculture is the agency principally tasked to implement the following legal rules affecting competition in the agriculture and fishery sectors.

- (1) The Magna Carta of Small Farmers of 1992 (Republic Act No. 7607) grants small farmers the right to "participate in a market free from monopoly, cartel or any other situation which may suppress prices to their disadvantage," and yet it also encourages concentration among small farmers by requiring them to adopt production and marketing strategies to avail of economies of scale.
- (2) The Agriculture and Fisheries Modernization Act of 1997 (Republic Act No. 8435) mandates: (a) preferential treatment of certain businesses by the Board of Investments; (b) regulation of certain agricultural and fisheries activities; and (c) protection of small farmers and fisher-folk from "unfair competition, such as monopolistic and oligopolistic practices." The law encourages concentration through "horizontal and vertical integration, consolidation and expansion" of agriculture and fisheries groups.
- (3) The Philippine Fisheries Code of 1998 (Republic Act No. 8550) provides for: (a) regulatory barriers preventing non-Filipinos from enjoying fishery and aquatic resources in the country; (b) preferential treatment of fisher-folk organizations for fishery rights in municipal waters; (c) regulation of fishery activities and fishery products; and (d) promotion of private-sector use of fishery resources.
- (4) The Agricultural and Fisheries Mechanization (AFMech) Law of 2013 (Republic Act No. 10601) mandates: (a) preferential treatment of local manufacturers in granting loans; (b) regulation through product standards, testing of products, registration of ownership, and accreditation of market players; and (c) promotion of private-sector participation in the manufacture and sale of agricultural and fisheries machinery.
- (5) The Agricultural and Fisheries Mechanization Law of 2013 promotes the clustering of farm lands into at least fifty-hectare clusters. Meanwhile, the Comprehensive Agrarian Reform Law of 1988 (Republic Act No. 6657, as amended by Republic Act No. 9700 and others) imposes a regulatory barrier to expansion of privately owned and operated farms by prohibiting ownership of agricultural land in excess of five hectares. This legal barrier possibly contributes to (a) the relative absence of a formal market for agricultural lands, (b) the undervaluation of agricultural lands, and (c) the refusal of banks to accept agricultural lands as collateral for loans to farmers. It thus poses a possible constraint to agricultural development, competitiveness, and poverty reduction. It also makes the clustering envisioned in RA No. 10601 more difficult since it would involve more small holders per cluster.
- (6) The Agricultural Tariffication Act of 1996 (Republic Act No. 8178) removed quantitative restrictions on agricultural products, except rice, and imposed

the maximum tariff rates committed by the Philippines through the World Trade Organization. The law also authorized the President to prescribe the tariffs and propose modifications to the Minimum Access Volume.

Agriculture: Rice

The National Food Authority (NFA) undertakes the policy actions that affect competition in the rice market, such as (1) procurement and sale of rice in the domestic market; (2) regulation of rice importation; and (3) licensing of rice and corn businesses.

- Domestic procurement. Prior to 1985, the NFA regulated the price of rice to achieve its mandate of ensuring that farmers get a fair price for their harvest and a fair return on their investment. Executive Order No. 1028 (1985) removed the NFA's regulatory power over the price of milled rice and instead required the NFA to directly compete with the private-sector in purchasing palay from farmers.
- (2)Domestic sale. The NFA sells milled rice to the domestic market, specifically, to accredited retailers of milled rice, government agencies (e.g., Department of Social Welfare and Development), and private entities (e.g., through NFA Rolling Stores) (NFA 2017). In 2015, the NFA's market share was only 13% due, according to the NFA, to the large supply of affordable, good quality commercial rice (NFA 2015).
- (3) Importation. The Agricultural Tariffication Act mandates the NFA to regulate and license rice importation (Section 6.a.xii, National Grains Authority Act). The Philippines committed to the World Trade Organization to remove all non-tariff barriers to the importation of agricultural products, but obtained approval to retain the quantitative restriction on rice importation for a specific period. The approval was extended for five years in 2007, extended for another five years in 2012, and is set to expire in 2017. Although socioeconomic planning officials have proposed the removal of the quantitative restriction on rice importation in order to lower the retail price of rice, Executive Order 23 extended the minimum access volume commitments on rice until June 30, 2020 unless the amendment to Republic Act 8178 (Tariffication Act of 1996) is made.
- (4)Rice cartel. In 2013, a Senate committee investigated reports of a cartel in the rice market, and concluded that such a cartel existed and had used dummies to rig the NFA bidding process for rice import allocations (Senate 2013). A news agency reported that the cartel, referred to as the "Big Seven," has been controlling the supply and retail price of rice in Metro Manila since the 1990s (GMA News 2014).

## Industry: Electricity

(1) Competition objectives. The Electric Power Industry Reform Act of 2001 (EPIRA) (Republic Act No. 9136) restructured the industry into four sectors: generation, transmission, distribution, and supply (Section 5). One of its policy objectives is to create a regime of free and fair competition (Section 2(c)) where vertical integration between the distribution and the generation was previously the rule. The EPIRA created competition in two sectors: (a) the generation sector by "unbundling a vertically integrated industry"; and (b) the end-user sector by creating a retail supply sector which cater to and compete for contestable consumers (Navarro et al. 2016).

The Energy Regulatory Commission (ERC) was created as a "strong and purely independent regulatory body...to ensure consumer protection and enhance the competitive operation of the electricity market" (Section 2(j)). The ERC was tasked to promote competition, encourage market development, ensure customer choice, and penalize abuse of market power in the restructured electricity industry (Section 43).

(2) *Power generation.* The EPIRA enhanced competition in power generation by: (a) mandating the sale of government generation assets with the National Power Corporation (NPC) to the private sector; and (b) allowing foreign investments by declaring that power generation is not a public utility operation and thus not covered by nationality restrictions.

The EPIRA imposes limits to a market player's ownership, operation, or control of the installed generating capacity for a grid and for the country. In 2014, the entities with the largest market shares were: (a) San Miguel Energy Corporation (SMEC), which had 33% in Luzon and 24% nationwide; (b) First Gen Corporation, which had 20% in Luzon, 15% in Visayas, and 17% nationwide; (c) Aboitiz Power Corp., which had 17% in Luzon, 12% in Mindanao, and 15% nationwide; (d) Power Sector Assets and Liabilities Management (PSALM) Corporation, which had 36% in Visayas, 14% in Mindanao, and 9% nationwide; (e) the National Power Corporation (NPC), which had 48% in Mindanao and 6% nationwide; (f) AES Philippines, Inc., which had 8% in Luzon and 6% nationwide; and (g) Global Business Power Corporation, which had 28% in Visayas and 4% nationwide (DOE 2016).

(3) Power transmission. The EPIRA sought to promote competition in power generation by granting open access to the transmission system. The statute also provided for a government-authorized private monopoly of power transmission. In 2008, Congress granted the National Grid Corporation of the Philippines (NGCP), a private corporation, the legislative franchise

(Republic Act No. 9511) to operate and maintain the transmission system. The franchise prohibits the NGCP from engaging in anti-competitive behavior, such as cross-subsidization, price or market manipulation, and other unfair trade practices.

Power distribution. The EPIRA mandates that power distribution shall (4)be undertaken by (a) government-authorized private monopolies, such as private corporations and electric cooperatives; and (b) government entities, such as local government units. Government authorization for private entities must be granted through a legislative franchise, except that for a limited period, the National Electrification Administration was allowed to renew the franchises of electric cooperatives.

#### Industry: Water

Water distribution is a monopoly of government entities or government-authorized private entities. Prior to 1997, for Metropolitan Manila, the Metropolitan Waterworks and Sewerage System (MWSS), a government-owned corporation, was given the exclusive authority to build, own, and operate the waterworks and sewerage in the metropolis (Republic Act No. 6234, as amended). The National Water Crisis Act of 1995 (Republic Act No. 8041) authorized the privatization of any segment, operation, and facility of the MWSS. In 1997, the MWSS entered into two concession agreements which created government-authorized private monopolies that would manage, operate, repair, refurbish, and collect fees for the water distribution systems in designated service areas. These service areas were awarded on the basis of competitive auction which introduced market competition at the start of the 25-year agreements; subsequently, the MWSS was reconstituted to serve as regulators of the two monopolies.

For areas outside Metro Manila, local water districts are given the exclusive authority to build and operate water supply and distribution systems in their geographic area, by virtue of the Provincial Water Utilities Act of 1973 (Presidential Decree No. 178, May 25, 1973). Local water districts are considered government-owned corporations (Davao City Water District v. Civil Service Commission, G.R. No. 95237-38, September 13, 1991), and thus their operations may be considered governmentowned monopolies. The Metro Manila template for private sector participation in water distribution may be a good path to the future.

#### Services: Retail trade

For half a century, the government protected the retail trade sector from foreign competition through the Retail Trade Nationalization Act of 1954 (Republic Act No. 1180, as amended). Most people understood this to have had an ethnic (anti-Chinese)

dimension. The retail trade sector was opened to foreign competition through the Retail Trade Liberalization Act of 2000 (Republic Act No. 8762).

The Price Act of 1992 (Republic Act No. 7581, as amended) provides for the regulation of the retail prices of goods that are considered as "basic necessities" and 'prime commodities.' Regulation is done through: (1) automatic price control, which occurs without need of any action by the regulatory agencies when an area has been declared as a disaster area, or is under a state of calamity, emergency, suspension of the privilege of the writ of habeas corpus, martial law, rebellion, or war (Section 6); and (2) mandatory price ceilings, which may be imposed by the President upon recommendation of the regulatory agency or the Price Coordinating Council, in certain situations, including an impending calamity, emergency, or event causing artificial and unreasonable price increases; widespread illegal price manipulation; and spike in prices (Section 7). Although sporadically employed in the past, RA 7581, as amended, is still in force and may if employed haphazardly affect the business environment.



9

# **Summary**

In this work, we started by discussing the relationship between competition policy and regulation, two alternative interventions into the market by the state. As such, they can only improve social welfare if at the outset they try to fix a market failure. To appreciate the advantage of each, we first present the variety of market failures that may confront the state authorities. The market failures for which regulation seems to be the proper address are of three genres: cooperation failures such as "the fishing game" and "the public goods game," the scale economies-based market failures such as the natural monopoly, and finally, the meta-market failures.

We then turned to market failures for which competition policy seems the proper address, viz., artificial monopoly or any abuse of market power. Market dominance is not a crime in modern jurisprudence of competition law; abuse of market dominance is. A monopoly may be artificial—a single firm rationalized only by a legal franchise but not by economies of scale, or many firms coordinating behavior by a collusive agreement among themselves, such as cartels. We show graphically how consumer welfare (consumer's surplus) rises monotonically as the number of players enter a symmetric Cournot competitive market, one where firms compete by quantity offers. Only at the Walrasian limit, that is, when a very large number of firms are in competition, is the market failure completely solved. Any intermediate number will serve up only a partial solution. We then turned to Bertrand competition where firms compete through price offers for perfectly substitutable q. In this case, only two firms can already attain the maximum consumer welfare, thus completely solving the market failure. This also means that competition policy has no place. Bertrand competition is closer to the competitive reality as perceived by businessmen. It is also made salient by the 'price wars' that time and again hit the headlines. There are two dimensions that should be of interest to PCC: (1) Bertrand competition has stronger inducement for innovation due to its winner-takes-all tournament character, and (2) Bertrand competition has stronger inducement for collusive behavior and trusts, thus, transforming the market to a monopoly. In the presence of an imperfect substitute

to q, the power of a monopolist is diminished. We showed using an alternative Cournot model with imperfect substitutes that the equilibrium price in the market is intermediate between the price of the monopoly and the price of a duopoly. Thus, the imperfect substitute delivers a welfare relief for consumers. The more imperfect substitutes there are, the less power each firm has and the better for the consumer. It is thus important for the PCC to be aware of the presence of imperfect substitutes and their degree of substitutability to determine the social cost of a monopoly and the urgency of its address.

We also identified the advantages of competition policy over regulation of an artificial monopoly: (1) reduced information asymmetry; (2) third party witness to abuse of market power; (3) greater rampart against capture by private interests; (4) the reduced likelihood of producing a missing market plus increased likelihood of ending up as state-ownership; (5) the smaller cost of mistakes—say, allowing entry where the monopoly is natural results in no entry; and finally (6) stronger impetus for innovation and TPF growth. These advantages are more pronounced under weak than under strong institutions.

To provide perspective, we then presented various competing philosophies, structuralist versus consequentialist philosophies, claimed to underlie competition policy. The older Structure-Conduct-Performance (SCP) doctrine harps on structure as the wellspring of abuse; structure determines conduct which determines performance or profitability. It prescribes that a market share in excess of a prescribed level is per se anti-competitive. The consequentialist views, namely, the Chicago School and the Evolutionary-Schumpeterian view focus on the endpoint, viz., the benefits or otherwise to consumers as the gauge of what is a good or bad structure. A market share of 90% may be consumer-friendly if it is attained and maintained by technical prowess and/or price discounts. The Evolutionary-Schumpeterian view emphasizes precisely the role of innovation: a small number of large competitors may generate more cost cutting innovation than a large number of small competitors. The inverted U hypothesis is its iconic symbol. We observed that the consequentialist philosophies have wrested ascendancy in the last five decades which we think is good for countries in the catchup stage of development. Chapter 4 discussed the various issues related to the relevant market problem: smallness, existence of imperfect substitute, non-integration of markets, state-mandated anti-competitive rules, and competitive neutrality. We then turned in Chapter 5 to the role of institutions in the choice between competition policy and industrial policy, which is especially relevant to the East Asian exceptionalism debate. Our thesis is that strong interventions like industrial policy require strong institutions to see to ample fruition. Weak institutions tend to buckle under the enormous privatizable rents generated by hard industrial policy. Soft industrial policy is preferred under weak institutions. In Chapter 6, we gave a short survey of the evidence on the effect of competition law and competition on growth, innovation, and total

factor productivity. Limited resources confront PCC with the need to choose its battles carefully. In Chapter 7, we dealt with the choices the PCC faces to maximize "bangfor-the-buck:" by sector in respect to poverty reduction and competitiveness, victim complaint-based suits. By sector, we argued that poverty reduction is largest with growth in the tradable goods sector, especially the manufacturing and agricultural sectors. We gave evidence that manufacturing share reduces poverty incidence while services share increases poverty incidence for low income countries. Taking up cases brought about by victims of abuse of market dominance is a way to reduce information asymmetry that normally favors dominant firms. The use of credible and verifiable undertakings in M&A players was highlighted as one way to deal with M&A applications. In Chapter 8, we presented a short survey of the laws, their scope, and the institutions that make and/or enforce them in the Philippine competition environment. These laws and institutions formed as they are from a long history of adaptation to changing environment and philosophies call for more in-depth study and possibly new rules towards greater coherence and transparency.



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