Rethinking the Brain Drain in the Philippine Diaspora: With Special Reference to the Philippine Social Sciences

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The dominantly South-to-North direction of international migration in earlier periods gave rise to the common view that cross-border population movements disproportionately benefited the North-receiving countries while undermining the development of South-sending countries. This was deemed particularly the case in the outflow of highly-skilled migrants as this depleted not just the human resource base of sending countries, but robbed them precisely of the kinds of talents, knowledge and skills needed for their own development. For South-sending countries this loss of valuable talents and skills came to be known popularly as the "brain drain"—long considered in the literature to be a major cost of international migration for the developing world.

But notwithstanding the political / ideological controversies spawned by international migration between (and within) countries of origin and destination and the restrictive emigration / immigration measures adopted by both sending and receiving countries at various times, international migration persists and is continuously growing and intensifying. Today, cross-border migrations are seen as part and parcel of contemporary social and economic life. The forces of globalization e.g., the ease in travel and communications and the liberalization of trade, capital and services flows have increased the volume, complexity and diversity of today's cross-border movements. In contrast to the limited patterns of earlier migrations which comprised largely of permanent emigrants from the Third World to the developed world for economic reasons, 21st century migrations involve many more people moving to many more places and for reasons both economic and non-economic. The current period thus, is witnessing the emergence of entirely new categories of migrants—temporary or short-term migrants, multistage migrants, return migrants and circular migrants. Given the shifting contexts, and causes and consequences of cross-border movements, many now view international migration as a continually evolving phenomenon.

As such, analysts have begun to revisit the empirical-historical evidence on international migration and the analytical frames and models used in understanding the phenomenon. With this comes a re-examination of the so-called "costs and

benefits" of international migration; and a re-assessment of the migration-development nexus from the standpoints of both sending and receiving countries as well as from a global perspective. Interestingly, findings arising from recent and ongoing migration research are changing the perspectives on international migration in both substance and tone.[1] Today, there appears less of the hardline view that international migration harms the Third World and benefits the West; and in the case of the brain drain specifically, new accounts seem to suggest that this does not necessarily translate into a zero-sum game whereby the gains accruing to (North) receiving countries constitute losses for the (South) sending ones.

It is in the foregoing vein that this paper seeks to re-examine the "brain drain" that has come to be associated with the outflow of Filipinos from the homeland. Increasingly, the term "Philippine diaspora"[2] is being used to describe this outflow owing to the large and continuous movement of Filipinos to other lands in the last 50 or so years. Current estimates place the number of Filipinos in the diaspora to stand at eight to nine million (or some 10 percent of the population) spread in over 190 countries in all continents or regions of the world. In particular, the paper is interested in assessing how the Philippine social sciences sector has been affected by skills and talent migration in the diaspora. However, locating the topic within the country's overseas migration history and the debates and public discourses on the brain drain, while noting at the same time, ongoing changes in the nature of international migration makes for a rather lengthy essay. The paper begins with an overview of the Philippines' outmigration history and then focuses on those periods when brain drain issues emerged as issues of public concern. The paper also discusses some of the definitional (both conceptual and operational) difficulties surrounding the notion of a brain drain, and examines earlier studies and available data on the phenomenon. Finally, its special focus on the social sciences is expected to raise understanding of how the growth and development of these disciplines on Philippine soil may have been impeded by the brain drain (or enhanced by cross-border brain flows).

THE BRAIN DRAIN IN THE PHILIPPINES' OUT-MIGRATION HISTORY

If one were to trace the history of Philippine overseas migration from the early 1900s to the present, brain drain issues appear to have been of greater import first in the 1960s, and then in the current period, beginning in the late 1990s as we crossed over to the present millennium.

Prior to the 1960s, Filipino overseas migrants comprised primarily of agricultural farm hands recruited by the Americans to work in the sugar and pineapple plantations of Hawaii and other fruit plantations in the western part of the United States.[3] Historical accounts reckon that this first wave of Filipino migration began in 1906 with the departure of the first group of *sacadas* (farm workers) for Hawaii, and continued all through the American colonial period and the immediate post-war era or after the Philippines gained its Independence in 1946. In the post-war period, migrating agricultural workers were joined by other low-skilled workers recruited likewise by the Americans to work with the US naval/military forces doing reconstruction and rehabilitation work in Asia and the Pacific. Understandably, brain drain issues were of little concern during this period, given the low level of skills involved in this first wave of Filipino outmigration.

It was not until the mid-1960s that concern over the impact of brain drain caused by the continuing departure of Filipinos began to emerge. Although some Filipino college graduates and professionals were known to be among those immigrating to the US in the late 1950s and early 1960s, their numbers were too small and the notion/concept of a brain drain was just beginning to develop or be articulated at that time. What triggered the outflow of a more sizable number of highly-skilled Filipinos was the passage of the 1965 US Immigration Act which abolished earlier restrictions on the numbers and selection system

of immigrants to the US. This created a new immigrant category to be filled up by "professionals, technical and kindred workers." The impact of the 1965 US Immigration Law on the Philippines was immediate.[4] Immigration statistics show that the number of Filipino professionals immigrating to the US increased markedly from 90 in 1965 to 1,066 in 1967. There are indications, too, that the outflow of skills and talent came mainly from the medical and nursing professions. Data from the US immigration-related statistics show that in 1966, 25 percent of foreign resident doctors in the United States were Filipinos.

It was thus during this time that brain drain became a public issue. Drawn from the then emerging theory on human resources / capital, the brain drain argument posits that highly educated and skilled persons play crucial roles in a country's development. Hence, the departure of Filipino professionals in the 1960s was seen as costing the Philippines a lot, including the loss of necessary human resources at a critical stage in the country's development, and losing out on precious public investments on education and the skills-formation of citizens.[5] Expectedly, this second wave of Filipino outmigration consisting of the country's highly educated class fueled anti-colonial sentiments against the US which was perceived as simply changing its immigration laws / policies to suit its own labor needs and interests. Corollarily, this fueled nationalistic sentiments among Filipinos who bemoaned the loss of skills and talents due to international migration, and the inability of government to provide proper employment to keep the brightest citizens at home.

This outflow of professional and highly-skilled Filipinos primarily to the United States continued in subsequent decades and was exacerbated by the imposition of Martial Law in 1972 when not a few of the country's scholars and professionals fled the Philippines. So too, for those who had already left or were leaving the country who decided not to return home. Meanwhile, other developed countries like Canada and Australia began opening up immigration quotas for highly-skilled occupations. The liberalization of immigration quotas in countries other than the United States attracted an increasing number of professionals and compounded the brain drain situation obtaining in the Philippines.

The outflow of Filipino professionals, however, was soon overshadowed by another wave of Filipino overseas migration that began to form in the latter half of the 1970s. This third wave consisted heavily of male construction workers bound for Saudi Arabia and the Middle East to meet the labor needs of the region's construction boom. Analysts consider this period a watershed in Philippine migration history as this marked the beginning of large-scale international labor contracting for the country.[6] In contrast to the earlier outflows of Filipino agricultural workers in the first half of the 1900s and of Filipino professionals since the 1960s, who permanently settled in the United States and other countries of destination, the Middle East migration stream consisted of low-skilled workers on short-term / temporary contracts.

Deteriorating political and economic conditions at home caused Filipinos of few skills and little education to swell the ranks of overseas migrants particularly in the late 1970s and through the 1980s and 1990s, and to a lesser extent, up to the present. The destinations of this third wave of Filipino overseas migrants (popularly referred to as OCWs for overseas contract workers, or OFWs for overseas Filipino workers) have diversified over time in response to changing global labor demands and the opening of new economic opportunities outside the Middle East.[7] Of importance is the opening up of neighboring countries in Asia specifically as destinations of Filipino OCWs leaving for Japan, South Korea, Taiwan, Hong Kong, Singapore and Malaysia in more recent decades. Significantly too, the skills composition of OCWs to these new destinations shifted from the mostly construction workers bound for the Middle East to production and factory workers (bound particularly for South Korea, Japan, and Taiwan), and workers in entertainment and domestic services (bound

particularly for Hong Kong, Singapore, Malaysia, and Japan).

Evidently, the OCW migration did not constitute a brain drain as this involved migrants of low skills with time-bound working contracts who would return to the Philippines. But though this wave of lower-skilled OCW migration dwarfed the migration of highly-skilled and highly-educated Filipinos, public debates and discourses kept alive the arguments pertaining to the "brain drain" by loosely associating the outward mobility of Filipinos, regardless of skills, with brain drain losses.[8] The OCW wave of migration seems to have added yet another layer to the cost of the country's international migration. Hence, in addition to assumed national losses from the brain drain, the OCW migration stream was seen as causing family separations and the neglect of children, thereby contributing to the breakdown of Filipino values and the social fabric. These added "social costs"[9] gave rise to rather overly negative views on the Philippine diaspora and to lamentations over the inability of successive Philippine governments to improve domestic economic conditions and arrest the tide of OCW migrations (and with this, the brain drain).

It is worth noting that the harsh critiques on the Philippine diaspora by media and the public at large has not stopped the departure of Filipinos to various destinations worldwide. From the 1990s onwards and through economic and political downturns and recoveries, the number of Filipinos moving permanently or temporarily to live and/or work abroad has remained at an all-time high (estimated by the International Organization of Migrants or IOM to involve over 3,000 Filipinos departing everyday to work abroad). Consequently, not a few analysts concede that the Philippines' overseas migration has taken a life of its own—one involving many players, networks and processes (e.g., at the level of individual migrants and their families and communities, townmates in places of destination, recruitment agencies, businesses, government agencies, etc.) and rendering the diaspora beyond the easy control of the state and its policies.

In turn, the persistence of Filipino overseas migration maybe slowly changing public reactions to, and the national conversation on the Filipino diaspora. As if to balance the earlier discourses on brain drain losses and the social costs of the country's overseas migration, current discussions have shifted to the "benefits" side of the Filipino diaspora.[10] At present, the most talked about benefit is the remittance from the country's overseas migrants which is now widely acknowledged to exceed the Philippines' ODA receipts, and to be contributing positively to the national economy via increased household consumption/expenditures on education, health and housing, and increases in household savings and investments. In addition (and bearing directly on debates on the brain drain), increasing reference is being made to the opportunities opened up by current-day cross-border migration for skills and technology transfer, and knowledge (and market) access and networking. New discourses and perspectives thus allow for possibilities of looking at skills and talent migration as redounding to "brain gains" and not necessarily to brain drains.

Along with the above shift in perspectives are new developments in the global economy that seem to be encouraging new forms of brain flows or skills and talent migration from the Philippines and other source countries. Already, some increases have been reported in the number of outbound Filipino professionals in response to increasing competition in the global labor market; demographic and economic imbalances across countries owing to the "ageing" of developed economies, and moves towards the integration of Asian countries into regional entities (e.g., as ASEAN) that would allow for freer intra-regional labor mobility.[11] These developments are creating new demands for Filipino skills and expertise not only in the health professions but in a host of other professional fields such as engineering, management, teaching/education, communication, banking and finance, among others. Whether this resurgence in the outflow of Filipino skills and expertise in the current period constitutes a brain drain type of migration needs

to be examined given the changing terms and contexts of today's international migrations. The remainder of the paper thus takes a closer look at those periods in the Philippine overseas migration history when brain drain issues seemed imminent.

A SECOND LOOK AT THE PHILIPPINES' BRAIN DRAIN IN THE 1960s

As mentioned earlier, the first wave of brain drain migration from the Philippines began in the 1960s with the immigration of Filipino professionals to the United States. A review of the related studies and data on this offers us a better appreciation of the scope and dynamics of the Philippines' brain drain at that time.

The first and most comprehensive treatment of the brain drain in the Philippines during the period was a study undertaken by senior researchers of the Institute of Philippine Culture (IPC) of the Ateneo de Manila University in 1967.[12] In their introduction to the study, the authors mention that awareness of the brain drain was high among Filipinos mainly because of its emergence as a public policy and intellectual issue. This was so because of the worldwide concern over the piracy by the United States of talents and skills from other countries or outside of its borders. Support for this came in the form of various statistics from US agencies, as the Immigration and Naturalization Service, showing significant numbers of US immigrants to consist of highly-skilled professionals from countries not only in Europe but from the less developed ones in Asia, Latin America, and Africa. The statistics that resonated closer to home pertained to the increasing number of Filipino doctors in the United States and confirmed by the visits of Filipino politicians (Senators and Congressmen) who reported on the large number of Filipino health professionals in various places / states in the United States and Canada. The medical brain drain therefore, was real and paramount to Filipinos.

But other than the medical brain drain, many observers, including members of the media, felt that there was not enough evidence to show the extent and effects of the brain drain. It was for this reason that IPC embarked on its brain drain survey in 1967, some two years after public interest on the issue had peaked following the liberalization of the US immigration law in 1965.

It is instructive that, then as now, the IPC researchers struggled with the concept of a brain drain and how to operationalize this. In their study, the brain drain consisted of those nationals leaving the country for studies or work abroad and *never return*. Such idea, "never to return" was key to their conceptual construction of the brain drain. In addition to non-return, the study also defined the loss of talent from migration to mean the emigration of those with a bachelor's degree since to the popular mind, the loss of talent generally meant *the loss of college graduates* from the country. The assumption was that the number of Filipino college graduates leaving the country would provide a maximum estimate of the brain drain given that this rather generous definition would include not so talented college graduates.

Because the existing statistics and data used to support brain drain claims were drawn from outbound migration statistics (e.g., the number of visas granted Filipino nationals by advanced countries) that carried no information on "return rates," the IPC study embarked on a survey that would offer a "first estimate" of the scope of the country's brain drain. Following their operational definition of the brain drain but further excluding medical and nursing graduates from the study (due to the already high attention accorded them in public discussions), the authors designed the survey to have as its respondent population "those graduates of Philippine colleges from 1948 to 1963, whose course had been either liberal arts, education, law, engineering or commerce." These five courses accounted for 89 percent of college enrolment in 1965-1966; whereas the 1963 cutoff date would have allowed a graduate to leave and study abroad, return home and leave again by the time the study began in mid 1967.

The study respondents thus consisted of some 1,038 Filipinos who graduated from college between 1948 and 1963 from 129 colleges that in

turn were drawn from the 631 Philippine colleges listed in 1967 as offering at least one of the five courses of interest in the study. Statistical sampling procedures were followed, although with some purposive oversampling of the Philippines' leading universities known to produce the country's best and brightest, and hence, the likely sources of a brain drain.

This first-ever survey on the Philippines' brain drain yielded interesting results for understanding the magnitude and dimensions of the brain drain phenomenon of the period. Following are among the survey's major findings:

- of the graduates of Philippine colleges during the study period, about seven percent eventually emigrated or took up permanent residence abroad;
- a 62 percent majority of college graduates did not pursue post-college studies, while 30 percent of them did so locally (There was little difference in the emigration rates of these two groups: four to five percent of them eventually emigrated.);
- the remaining eight percent of college graduates left to pursue post-college studies abroad and it was among them that the emigration rate was higher. For this group, the rate was estimated at a maximum 40 percent due to the oversampling of college graduates from the elite Philippine colleges / universities; and
- of those who pursued post-college studies abroad, a further distinction was made between those who paid for their own foreign education and those supported by government or foundation scholarships or other institutional funds. About half of those who paid their own way never returned, while a much lower 17.7 percent of those supported by external funds left the country for good.

Based on the foregoing findings, the IPC study concluded that the country's brain drain had not reached "crisis proportions." Importantly, it drew attention to a necessary rethinking of the brain drain by focusing on nationals who went abroad to study, since it was this group that exhibited "a higher than average concentration of talent." And even among this group, it was arguably from among the subgroup which received grants and scholarships from government or other private institutions that the most talented were to be found. Hence, despite the oversampling of elite colleges, just 17.7 percent or roughly one out of five of this subgroup ended up permanently residing abroad, prompting the study to assess the country's brain drain to be at most "moderately serious," but not quite causing for the Philippines a "critical loss of personnel" as was popularly believed.

The IPC study's refinement of the notion of a brain drain (to consist of non-returning nationals who left to train abroad) is most useful, particularly when examining the impact of the brain drain on the social sciences sector. The refinement essentially captures the academic elite from which most of the country's social science scholars and researchers (being university-based) come from. One would assume, therefore, that the extent of the brain drain among Filipino social scientists during the IPC study period (1948-1963) could not have been more than the maximum national estimate of one outflow for every five professionals trained abroad.

Still, there are reasons to believe that the brain drain in the social sciences during the period in question may have even been lower than the national estimate. For one, it was during this period that US foreign aid to the Philippines consisted of a large portion of technical assistance meant to quickly build human resource capacities for nation-building in the immediate post-Independence period. Graduate scholarships / fellowships thus formed a major component of US development assistance to the Philippines through the decades of the 1950s, 1960s, and 1970s. The Fulbright program established in the country in 1948 and which sends Filipino nationals to top US universities for post-graduate education has been the leading and longest-running foreign scholarship program in the Philippines. Between 1948 and 1963, Fulbright had sponsored the post-graduate training of 828 Filipinos in American

universities, of which 163 (or 20%) were trained in traditional disciplines of the social and behavioral sciences.[13] Unfortunately, however, like most other offices and agencies of the period, the Philippine American Education Foundation (PAEF) which administers Fulbright grants does not maintain records on returning and non-returning scholars. The IPC study notes that some "returned grantees" were known to have left the Philippines again "to marry or work permanently abroad," while studies done by the US Council for Educational and Cultural Affairs reveals that visitors on government exchange programs (as the Fulbright-Hays scholars) did not contribute significantly to the brain drain.

The indications are clearer that returnees of the Fulbright and other foreign scholarship programs were responsible for the growth of the various study areas and scientific disciplines (the natural, social and human sciences included) in the Philippines and the development of these into degree programs in the country's tertiary education system. As mentioned earlier, the Philippines, in the decades following Independence, could not have produced its own scientific expertise and had to rely on the foreign training of its citizens to do this. Armed with master's and PhD degrees, returnees from foreign study programs went back to their universities to establish departments and found national professional associations for their disciplines. In the social sciences, Table 1 shows that member-associations of the Philippine Social Science Council (PSSC) were formed in succession in the 1950s, 1960s and 1970s (of PSSC's 13 regular member-disciplines, only three were founded later in the 1980s).[14] These professional social science associations also took on the task of producing their own discipline-based journals to disseminate the research and publications of members and to grow their respective disciplines on Philippine soil. Indeed, the founding of the country's social science associations and of PSSC itself in 1968 owes to the return of the majority of those sent to pursue their graduate studies abroad on government and foundation scholarships. Conversely, one might also say that the establishment of social science degree programs in Philippine universities, and the founding of national social science associations and journal publications would not have been possible if professional expertise and talents in the social sciences in the country were lost through a brain drain.

Table 1 PSSC Member-Associations by Year of Establishment, Journal Title, and Year of First Publication of Discipline Journals

PSSC Member-Associations	Year Founded	Name of Journal	Date of First Publication
Linguistics Society of the Philippines	1969	*Philippine Journal of Linguistics*	1970
Philippine Association of Social Workers, Inc.	1947	*Social Work*	1956
Philippines Communication Society	1987	*Philippine Communication Journal*	1986
Philippine Economic Society	1961	*Philippine Economic Journal*	1963
Philippine Geographical Society	1950	*Philippine Geographical Journal*	1953
Philippine Historical Association	1955	*Historical Bulletin*	1967
Philippine National Historical Society	1941	*Journal of History*	1941
Philippine Political Science Association	1962	*Philippine Political Science Journal*	1974
Philippine Population Association	1987	*Philippine Population Journal*	1978
Philippine Society for Public Administration	1981	*Philippine Journal of Public Administration*	1957
Philippine Sociological Society	1952	*Philippine Sociological Review*	1953
Philippine Statistical Association	1952	*The Philippine Statistician*	1952
Psychological Association of the Philippines	1962	*Philippine Journal of Psychology*	1968
Ugnayang Pang-AghamTao	1977	*AghamTao*	1978

It is also interesting to note that assessments made by PSSC on the state of the social sciences in the country in the 1970s hardly mention the brain drain as a problem facing the sector. A paper on the state of Philippine social science teaching and research by PSSC's Executive Director for the foundation conference of the Association of Asian Social Science Research Council (AASSREC) in 1976 cites in passing two Filipino anthropologists who were teaching in American universities;[15] whereas another PSSC paper prepared for the First Workshop on Social Scientists in South East Asia, also in 1976, mentions Filipino social scientists permanently residing in the US but only in connection with the fact that they continued to maintain their ties and membership in PSSC-affiliated social science associations.[16] Both papers were much more concerned about other challenges facing the country's social science community. Foremost among these was the assignment of the country's senior social scientists to university administrative posts or non-teaching tasks upon their return from training abroad, and which impeded efforts to advance the quality of social science instruction, writing, and research in the country. In addition, the papers mention that not a few of the country's universities and academic institutions were losing some of their trained social science professionals not to other countries, but to other agencies and offices in government or to the media and private firms. While some Philippine colleges and departments may have experienced real brain drain losses when a few social scientists failed to return from their studies abroad, the bigger brain flows from the social science academic community were due to the assignment and/or movement of the country's foreign-trained social scientists to high-level executive posts in universities and in other offices within and outside government.

A later paper prepared in 1987 by the founder of one of the Philippines' better-known social science research centers outside Metro Manila (the Research Institute for Mindanao Culture) for a consultative meeting on the local environment for social research, reiterates continuing constraints to fostering social scientific work in the provinces and regions.[17] The more major of these constraints were the low salaries of academics (which prompted many of them to sign up for heavy teaching loads and moonlight at other jobs), and the inadequate library and research facilities in provincial centers and universities. And in an interesting reference to the brain drain, the author notes that "because of bread-and-butter necessities imposed by the environment, the person never develops to more than a shadow of his full potentialities. This is a brain drain that I lament much more than the loss of developed talent to foreign countries."

In brief, we note that evidence on the brain drain in the 1960s and in the next two to three succeeding decades shows this to have been of lesser magnitude for the country as a whole and for the Philippine social sciences in particular, than the public perception of the phenomenon. Public perceptions and opinions on the extent of the brain drain seemed to have been strongly influenced by the high emigration rates of Filipino medical professionals, the departure of a few of the country's high profile talents and professionals, and the nationalistic discourses on the country's losses from a brain drain.

BRAIN FLOWS IN THE CURRENT PERIOD

In the earlier review of the country's overseas migration waves, the possibility of a resurgence of brain flows in the current period was raised because of globalization. It was noted that the volume of cross-border migrations has risen everywhere, with changes in the global economy now encouraging labor supply and demand flows to operate beyond national borders or internationally. Ongoing shifts in the locales of economic opportunity (i.e., as from the Middle East to China and India at present), economic-demographic imbalances caused by the ageing/graying of developed economies, and the increasing competition in the global labor market were mentioned as among the factors currently reshaping the nature of international migrations.

For the Philippines in particular, the foregoing factors led to diversification of country-destinations as well as the skills composition of Filipino overseas migrants. This diversification in turn, is breaking down earlier stereotypical images of Filipino migrant workers to be mostly male construction workers bound for Saudi Arabia, or women domestics and entertainers bound for Hong Kong, Singapore or Japan, or nurses and caregivers bound for Canada.

In recent briefings, officials from the Department of Labor have been announcing lower deployment of domestic workers particularly to Hong Kong, Singapore, and Italy and increasing share of highly-skilled workers and professionals among today's Filipino overseas workers.[18] Thus, Hong Kong and Singapore now host not only Filipino women domestics but also a growing number of Filipino professionals and junior and senior executives in multinational firms in banking and finance. The rise of China as an economic power has opened new migration destinations for Filipinos to Shanghai, Beijing, Macau and other cities as human resource development trainors, sales and marketing managers, teachers and other technical personnel. Many other accounts have appeared in the local papers on how Filipino workers are making their presence felt in high- and middle-level managerial, technical, and professional jobs. One account of Filipinos in Canada cites how they have landed high-level posts in British Columbia's hotel, hospitality and tourism industries.[19] Another account of Filipinos in the United Kingdom (which hosts the largest number of Filipinos in Europe at some 250,000) shows how the occupational profile of OFWs has diversified from domestic workers, caregivers and nurses, to teachers, business people, musicians, chefs, and caterers.[20] Even among sea-based workers, news features indicate that Filipinos are not to be found only among the lower-skilled kitchen and security crew on ships but as engineers and marine deck officers, and in luxury liners, as front desk staff, hotel directors, cashiers and accountants, and photographers, and entertainers on board.[21]

Although this shift in global labor market demand for higher-skilled and talented workers points to a rise in what is conventionally thought of as a brain drain, data systems and statistics on cross-border migrations in the Philippines (and most other countries) still do not provide sufficient information on the skills qualifications of migrants to refine characterizations and arrive at better estimates of today's brain flows. The statistics maintained by various government agencies such as the Commission on Filipinos Overseas (CFO) and the Philippine Overseas Employment Administration (POEA) classify migrants only by broad occupational and industry categories. Since these agencies were set up primarily to detect and protect earlier waves of lower-skill Filipino migrations, their statistics remain wanting for estimating and monitoring highly-skilled migration flows. Thus, changes in the skills composition of today's Filipino overseas migrants are deduced mainly from news reports and the deployment briefings given by Labor officials (as those cited earlier), and from economic data showing continuing growth in migrant remittances (even amidst the current global economic slump) and attributed by Central Bank officials to the higher earnings of professionals and highly skilled workers among the country's overseas migrants.[22]

But perhaps even more important at this time than precise numbers on the volume of talent and skills migration from the Philippines are other developments in the country's migration environment which tend to negate the basic assumptions and interpretations of the brain drain. The first of such developments is the temporary and shorter-term nature of contemporary migrations (as against the permanent emigrations of the past) which has weakened the "non-return" assumption behind brain drain arguments. A second development has to do with the fact that Philippine colleges and universities have been quite responsive to the demands of the global labor market, producing precisely those graduates needed by other countries (i.e., doctors, nurses and other health professionals, IT and computer

specialists, hotel and restaurant managers, engineers, maritime officers, human resource development experts etc.). Because of this, the brain drain assumption that outflows of skills and expertise create gnawing local labor shortages in given lines of work seems less true today than it may have been before. Even in the medical / health field for example, which is often cited in the Philippines as the sector worst hit by the brain drain, the country's pool of health workers has not really been depleted critically as shown by the excess (or oversupply) of Filipino nurses in the country at various periods in time.

Still, a third related development has been the rise of government (or the state) in the current period as a far more active player in directing the Philippines' overseas migration towards the outflow of higher-skill workers and professionals.[23] Having been a sending country for some time, the education sector has been adopting various measures to push for quality education with the hope of making both the country's education system and its graduates competitive in a global age. But in the absence of a large domestic employment demand for the country's university graduates and highly-skilled technical skills, government has assumed the role of brokering their hiring and employment in countries where the demand for Filipino professional skills and labor remains high or is rising.[24] Critics of government may find the state policy of encouraging the foreign employment of professional and highly-skilled Filipinos as tantamount to encouraging a brain drain, but other groups may see the soundness of the policy in terms of higher remittances and possible transfers of knowledge and technology via Filipinos returning from work contracts abroad.

In view of the ongoing shift in the skills and occupational composition of Filipino overseas migrants, it would not be surprising to find several graduates of the social sciences and related courses (psychology, social work, economics, administration, and management) among those leaving the country today for foreign employment. But this may not be the case for Filipino scientists (natural, human, and social) in academe however, on whom fall the task and responsibility of maintaining the national infrastructure for education and training the country's successor generation of science professionals. Available data on the return- and non-return rates of grantees under foreign graduate scholarships (identified in the 1967 IPC Brain Drain Survey as a major source of the brain drain) show that the academic sector as a whole has not been as badly affected by the Philippine diaspora as feared by many. The first set of such data pertains to the Fulbright-Philippine Agricultural Scholarship Program which began in 2001 and consisting of PhD and master's study grants in agriculture-related sciences (Table 2). Between 2001 and 2006, the program had a total of 143 grantees, as many as 36 (or 25%) of whom pursued basically social science programs as applied to agriculture e.g., agricultural economics, agricultural communication, natural resource management, rural development and sustainable international development. Of these 143 grantees, 13 (9%) are still on their study programs in US universities, and only three grantees (or just 2%) have not returned to the Philippines upon the completion of their graduate studies. The overwhelming majority of grantees, 127 of them (or 89%) returned to the country after completing their programs to comply with the two-year service contract they have with their home institutions in exchange for the program grant.[25] The Philippine American Educational Foundation staff, which administers Fulbright programs in the country, mention that most past grantees are in the country

Table 2 Status of Fulbright-Philippine Agriculture Scholarship Program Grantees (2001-2006)

Status	2001-2006	
Still on the Program	13	(9%)
Did Not Return at all	3	(2%)
Returned to Serve 2-Year Service Contract with Home Institution	127	(89%)
TOTAL	143	(100%)

today although a number are known to have left again to pursue a PhD or to have taken up work or residence abroad after staying at least two years in the Philippines.

The same pattern is observed from data obtained from the University of the Philippines (UP) Diliman on the current status of faculty members who were granted study leaves to pursue their graduate training abroad, covering the Academic Years 1999/2000 to 2008/2009.[26] Table 3 reveals that the large majority of UP's faculty members who were on these special study leaves have returned and resumed their teaching posts at the University (125 faculty members); while a few (five faculty members) returned to comply with their service contracts and left for abroad again, and still another 12 have returned to the country and joined other local firms or institutions other than UP. This makes the return rate relatively high: 142 out of the total 205 faculty graduate study recipients from 1999 to 2009 (69%), or an even higher 89 percent (142 out of the 160 recipients who have already completed their graduate study programs) if one were to exclude from the denominator the 45 UP faculty members who are still continuing with their graduate study programs in foreign universities.

Table 3 shows the non-return rate of UP faculty members to be low, consisting of some 18 who did not return and have remained abroad since

Table 3 UP Diliman Faculty Members Availing of Study Leaves to Pursue Graduate Studies Abroad, 1999/2000 – 2008/2009, by College and Current Status

College	Still in Graduate School	Returned to to UP	Returned to the Philippines but not to UP	Returned to UP and Left for Abroad Again	Did Not Return/Has Remained Abroad	Total
Asian Center	-	2	-	-	-	2
Asian Institute of Tourism	1	2	-	-	-	3
Archeological Studies Program	-	2	-	-	-	2
College of Arts and Letters	6	9	3	3	4	25
College of Business Administration	-	4	-	-	-	4
College of Education	-	2	-	-	-	2
College of Engineering	12	28	1	1	3	44
College of Fine Arts	-	2	1	-	-	3
College of Home Economics	2	2	-	-	-	4
College of Human Kinetics	-	1	-	-	-	1
College of Law	1	4	-	-	-	5
College of Music	1	2	-	-	-	3
College of Mass Communication	-	4	-	-	1	5
College of Science	8	30	5	-	9	52
College of Social Sciences and Philosophy	13	26	1	1	1	42
College of Social Work and Development	-	2	-	-	-	2
Institute of Islamic Studies	-	1	-	-	-	1
Institute of Labor Studies	-	1	-	-	-	1
College of Public Administration and Govenance	-	1	1	-	-	2
School of Statistics	1	-	-	-	-	1
Total	45	125	12	5	18	205

completing their graduate study programs. This number in turn translates to eight percent of the total 205 study leave recipients, or a higher 10 percent of those who have finished their programs and should have returned to the country by this time. Even if one were to add to this number the five faculty members who returned to UP but left for abroad again, the so-called brain drain among UP's faculty members would comprise only between 10 to 13 percent, considerably lower than the non-return estimates derived from the 1967 IPC Brain Drain Survey. If the non-return rates in the 1960s were closer to one out of five foreign study grant recipients, today, the comparable figure stands closer to one out of 10.

Finally, Table 3 shows that losses due to brain drain affect different educational fields or professions differently. Closer perhaps to the medical and health sciences, the UP units with the higher non-return rates are the College of Science, College of Engineering,[27] and College of Arts and Letters; while the non-return rates for other colleges, are nil or inconsequential. For the College of Social Sciences and Philosophy specifically, only one of the 42 foreign study grantees has not returned to the College. Compared to other fields and sectors, the evidence that we have for the 1960s and at present does not show the Philippine social sciences to have been affected much by a brain drain, particularly when reckoned in terms of the social scientists based in or affiliated with the country's universities. As noted earlier, however, social science degree holders or practitioners outside of academe are likely among today's college-educated migrating Filipinos.

One additional point should be mentioned about the foreign graduate study programs and fellowships extended to countries like the Philippines. Compared to the 1960s, the Philippines today enjoys many more of these foreign study fellowships not only from the United States but from Japan, Singapore, Australia, the United Kingdom and the European Union. Potentially, all these are springboards for a brain drain but since most fellowships employ moral suasion and / or stipulate a return-service contract for recipients (e.g., as Fulbright's two-year stay / service in the Philippines upon a grantee's completion of studies abroad), the return rates are high. The general policy of encouraging a temporary payback period among grantees helps ensure that foreign study fellowships redound to a "brain gain" for the Philippines as these are intended to do, while at the same time honoring the basic democratic principle of allowing individuals to move freely and locate themselves where they want to be, and where presumably, they can best develop and practice their profession.

Other than the evidence indicating that the outflow of talents and professionals from academe has been minimal, are other observations on the migration behavior and decisions of Filipinos overseas which seem to make the notion of a brain drain somewhat obsolete in the current period. One observation has to do with the return migration of a number of expatriate Filipino professionals who in the 1970s and 1980s were deemed permanently lost to the brain drain. Among this group of returning talents are renowned personalities as the president of the country's top engineering and science and technology university, who is today spearheading the move to upgrade engineering education and practice in the Philippines to the "highest levels of international standards."[28] The other professional fields would have their shares of "reverse brain drains" or outstanding returnees. In the social sciences, known returnees include intellectuals and scholars who were studying abroad during the declaration of Martial Law or who left and stayed away because of it, but have since returned to the country. (One of these in fact, is no other than a co-author of the 1967 IPC Brain Drain Survey who left thereafter to pursue a PhD in Sociology at Princeton University and who remained in the US in self-exile during Martial Law, and returned to the country in the 1990s. He has since taught at a university, founded a global South-South network and is presently a member of Philippine Congress as a Representative of a left-of-center party-list group.)[29]

Newspaper accounts, too, are replete with stories of Filipino professionals whom the country similarly "lost" to the brain drain in earlier decades, but who are coming back to share their practice and knowledge in a more regular way in the Philippines. Unlike the first group of returnees who have resumed permanent residence (or retired) in the Philippines, this group consists of (for lack of better term) "transnationals" or "circular migrants" who divide their time and professional practice between their country of destination and the Philippines. Ironically, the best known of this group of "brain flows" are high-level health professionals as brain and heart doctors and surgeons, dentists and implantologists and other specialists who come to the Philippines regularly at certain times during the year to practice in local clinics and hospitals and even teach in medical colleges.[30] Engineering and the other sciences and fields of professional practice would again have their counterparts of these "transnationals" and circulating talents.[31] In addition are other expatriate Filipino academics who come to the Philippines not as regularly, but to take on shorter-term teaching, research or community extension assignments in partnership with local schools and universities, or the government's *Balik Scientist* (Return Scientist) program,[32] or under the auspices of various international exchange programs.

In rethinking the Philippines' brain losses or gains from contemporary cross-border movements, it seems important to take note, too, of the role of associations and networks such as the Philippine-American Academy of Science and Engineering (PAASE) and the International Conference on Philippine Studies (ICOPHIL). The nature, goals and activities of groups and networks as PAASE and ICOPHIL illustrate some of the kinds of linkages and exchanges established between / among expatriate Filipino academics and their colleagues in the homeland, and demonstrate how cross-border movements of professional talents and skills can potentially translate to a brain gain for a sending country as the Philippines.

PAASE was founded by Filipino expatriate engineers and scientists in Indiana in the United States in 1980. It aimed explicitly to bring together scientists, engineers, and social scientists of Philippine descent residing in the United States or in other countries "to provide a means for the transfer of science and technology advances between the United States and the Philippines.[33] Since its founding, PAASE has held annual general meetings and scientific conferences except in 1984 and 1989. The inaugural Annual PAASE Meeting and Symposium (or APAMS) was held in Manila in 1981, afterwhich it was held mostly in the United States from 1982 to 1999. APAMS returned to the Philippines in 2000 and beginning 2003, it has been held alternately in the Philippines and the Unites States. PAASE had some 205 listed members in 2008 consisting of 137 expatriate Filipinos residing mostly in the United States and a few others in Canada, Switzerland, Germany, Australia and Singapore; and 68 members based in the Philippines. Most members are university-based scientists and engineers, with a few educationists and social scientists (from economics, psychology, statistics and policy analysis). In the latest 29th APAMS held at the Ateneo de Manila University in July 2009, there were 28 expatriate Filipinos who served as principal authors of research papers and joined 141 Philippine-based scientists, engineers and social scientists who attended the conference. The profiles of the 29th APAMS participants show some of them to be returnees to or retirees in the Philippines; while nine of those currently based abroad hold joint appointments / assignments with Philippine universities and research agencies. This reflects earlier research findings about return and circular migration.

As a "transnational" organization, it is worth noting that PAASE's founders and original members were among the highly-educated and talented Filipinos who left the country in the 1960s and who had kept their hope of using their expertise to benefit the homeland. In the more recent period, PAASE appears much more intent in pursuing its mission "… to reverse the trend of Filipino scientists and engineers using their talents and skills to help other countries. It wants the country to experience a brain gain by encouraging

overseas Filipinos to contribute to Philippine development."[34] As noted earlier, PAASE now holds its annual conferences more frequently in the Philippines (every other year). The theme of its 2009 conference—*Linking Science and Engineering to Development*—echoes PAASE's vision of fostering "fruitful collaboration among locally- and internationally-based Filipino scientists and engineers to address the science and technology needs of Philippine development."[35]

Composed mostly of scholars, researchers and writers in the social and human sciences, ICOPHIL grew out of several Philippine Studies groups based in different countries—the Philippine Studies Association based in Manila, the Philippine Studies Group of the Association of Asian Studies (AAS) in the US, the Philippine Studies Association of Australia, and smaller core groups in Europe and Japan (known respectively as EuroPhil and Japan-Philippines group).[36] Singly and collectively, these groups and associations are held together by their common interest in undertaking research on the Philippines, and in making Philippine Studies a field of intellectual inquiry and a forum for interdisicplinal dialogue and exchange on various aspects of the Filipino social experience. These Philippine Studies groups have convened international conferences, known as the ICOPHILs, that bring together social scientists and humanities scholars from the Philippines, expatriate Filipino academics from the US, Japan, Australia and Singapore, and other foreign (non-Filipino) "Filipinists." The first ICOPHIL was convened by the US-based Philippine Studies Group in 1980 and subsequent ICOPHILs have been hosted by other groups in Manila, Honolulu, Canberra, and Leiden. Unlike PAASE, ICOPHIL does not have a formal list of members and operates more like a loose network of scholars engaged in Philippine Studies. But like PAASE, ICOPHIL has regularized the holding of its conferences alternately in the Philippines and abroad. (ICOPHIL is held every four years, while the country-based groups hold their meetings and conferences annually or in-between the ICOPHILs.) The most recent ICOPHIL was held in Manila in July 2008. This drew some 308 participants including 194 scholars from Philippine colleges and universities, 27 expatriate Filipino academics, and 87 other foreign scholars from over 15 countries.

The ICOPHIL and PAASE experiences highlight the power of organizations and networks in connecting scholars and linking expertise across national borders. In between international gatherings and conferences, ICOPHIL and PAASE participants have exploited the use of modern information and communication technology to communicate and keep abreast with one another's work online. The vibrant growth of ICOPHIL and PAASE in recent decade offers examples of the processes that build and strengthen cross-border linkages among Filipino academics, thus negating the idea of a brain drain.

Finally, another kind of brain mobility persists among today's Filipino academics—that of short-term foreign postings/assignments or consultancies. As noted earlier, short-term work contracts dominate the country's overseas employment profile at present, and this arrangement pervades all occupational and industry groups or sectors. Among these academics are social scientists who accept a term or two of teaching assignments in universities/institutes in Singapore, Japan, Australia, Thailand, the United States, and other places. Filipino social scientists are also known to be active in various foreign consultancy assignments with UN agencies and other intergovernmental bodies such as the World Bank and the Asian Development Bank. Visiting and exchange programs set up by foundations and universities also offer them other opportunities for foreign assignments. Since they return to the country after their short-term assignments, their cross-border movements are not conjured as a brain drain in the traditional sense. Still, today one hears of colleagues talking about how consulting work detracts from the primary teaching and research assignments of Filipino social scientists in universities, just as it was 20 to 30 years ago when academics/social scientists complained of losing their colleagues to

administrative and executive jobs in universities and governments abroad.[37]

To conclude, we note that changes in the nature and circumstances of Philippine overseas migration over time have altered earlier thinking about the impact of overseas migration on national welfare and development. We have witnessed changes in perspectives, from one that tended to equate the outmigration of Filipinos (especially of those with higher education and better skills) as detrimental to Philippine development to one that views the phenomenon as not without potential benefits for the country. As opposed to the earlier discourses on the Philippines' brain drain—social costs and losses from the diaspora—there is today an increasing reference to the country's "diasporic dividends" from monetary remittances as well as from brain flows and gains. Attempts to analyze and understand the evolving nature and consequences of Philippine overseas migration, however (as this paper meant to do), are hampered by the lack of data for determining the movement of human skills and resources across countries, and for measuring losses and gains from migrating talents and experts. Existing statistics and information bases on migrant characteristics must go beyond general educational and occupational categories. Research on the contributions of the country's expatriate academics and professionals must go beyond the current focus on migrant remittances and should explore how "brain flows" are converted to "brain gains" (or losses). And here, Filipino social scientists can lend their expertise to improve the country's migration data bases and research on the many different impacts of skills and talent migration on development.

Since the training of human resources in given lines of work undergirds much of the debate on brain flows as losses or gains, it is useful likewise for social scientists to measure their sector in terms of the training of new pools of professional social scientists vis-à-vis the demand for the skills and services of their disciplines, both nationally and internationally. Available data from the Commission on Higher Education (CHED) show psychology, political science, economics, communication, social work and public administration in that order to attract the largest number of baccalaureate graduates. This reflects the desirability of these courses among Filipino college students as well as the employability or market demand for these disciplines. In contrast, much fewer pursue their Bachelor's degrees in history, sociology, statistics, geography, anthropology, and linguistics.

Table 4 Summary of BA Enrolment and Graduates Per Program (SYs: 2000-2001 to 2006-2007)

Program	Bachelor's	
	Enrolment	Graduates
Psychology	185267	34575
Political Science	129041	24322
Economics	74433	15396
Communication	46821	8464
Social Work	46821	6942
Public Administration	36202	6646
History	22472	4674
Sociology	18790	3537
Statistics	12115	1806
Geography	1011	101
Anthropology	903	181
Linguistics	802	291
Demography	--	--

CHED's data on graduate-level (master's and Doctoral) enrolment and completion offer the more useful gauge for assessing how the Philippines falls in terms of producing the numbers of professional social scientists to meet (1) the needs of replenishing the faculty complement of the different social science departments in the country's universities; (2) the demand for social scientists with advanced degrees in other sectors as national and local government agencies, businesses and private sector endeavors and local consultancies; and (3) external demand for Filipino social scientists for foreign consultancies or foreign jobs and assignments. At present, the data from CHED point to public administration, psychology, communication, and economics as the disciplines more likely to have numbers of master's and

Table 5 Summary of MA and PhD Enrolment and Graduates (SYs: 2000-2001 to 2006-2007)

Program	MASTER'S		DOCTORAL	
	Enrolment	Graduates	Enrolment	Graduates
Public Administration	61385	6646	3805	344
Psychology	9282	1005	1075	195
Economics	3436	661	209	7
Communication	2124	317	280	27
Political Science	1394	153	103	7
Statistics	1332	98	130	5
Sociology	1033	132	355	24
History	947	65	139	7
Anthropology	479	33	228	20
Demography	243	14	--	--
Social Work	222	64	--	--
Linguistics	148	10	1090	37
Geography	77	1	--	--

doctoral graduates to meet existing demands when compared to political science, statistics, sociology, history, anthropology, demography, social work, linguistics, and history (Table 5). A rather disturbing trend among the latter disciplines is that their MA and PhD graduates constitute fewer than 10 percent of their enrolment. These disciplines would have greater difficulty maintaining and building up their departments and would suffer from the departure of colleagues from academe for other postings nationally and internationally.

On the other hand, and assuming that issues on the quality of their training are addressed, psychology, communication, economics, and public administration will be able to grow and replenish themselves and meet the demands for their professional expertise in and outside the country. An increase in external demand for professional Filipino social scientists in coming years should not be discounted in view of the rise of high skills and talent migration in today's cross border movements, and other developments towards the integration of national economies into regional entities (ASEAN, ASEAN+3, Asia-Pacific) that will allow the freer mobility of human resources across countries. It behooves the Philippine social sciences to be prepared for such developments and not be set back by the departure of its professionals for foreign assignments.

NOTES

1 This rethinking of the impacts as well as the changing environment of cross-border migrations is evident in the new migration studies and publications including *World migration 2008*, Vol. 4—IOM World Migration Report Series, International Organization for Migration, Geneva; and *Migration and development within and across borders: Research and policy perspectives on internal and international migration*, Josh DeWind and Jennifer Holdaway, International Organization for Migration (IOM) and Social Science Research Council (SSRC), 2008. See also "Effects of migration on sending countries: What do we know?" Louka T. Katseli, Robert E.B. Lucas and Theodora Xenogiani, International Symposium on International Migration and Development, Population Division, UN Department of Economic & Social Affairs, Turin, Italy, 28-30 June 2006.

2 In his paper "Nationalizing transnationalism? The Philippine state and the Philippine diaspora," David Camroux notes that many studies on global diasporas make no mention of a Philippines / Filipino diaspora perhaps because the country is too small and insignificant. It was only in 2004 with the publication of the first *Encyclopedia of diasporas* in 2004 that a Philippine diaspora is mentioned. Camroux's paper is a release from the Centre d'etudes et de recherches internationales, Sciences Po, Paris, 2008.

3 See monographs written by Belinda A. Aquino, "From plantation camp to global village: 100 years of Hawaii Filipino history (Commission on Filipinos Overseas, 2006); and "Filipinos in Hawaii: 100 years and beyond" (Honolulu: Filipino Centennial Celebration Commission, 2006).

4 For a fuller account of the high-skills migration from the Philippines induced by the 1965 US Immigration Law, see "Brain drain in the Philippines" by Walden F. Bello, Frank Lynch and Perla Q. Makil. In A. Yengoyan and P. Makil (Eds.), *Philippine society and the individual: Selected essays of Frank Lynch* (Revised Edition), Institute of Philippine Culture, Ateneo de Manila University, Quezon City, 2004.

5 Also discussed in "Brain drain in the Philippines" Walden F. Bello *et al.* cited above.

6 See "Labor mobility, trade and structural change: The Philippine experience" by Manolo Abella in *Asian and Pacific Migration Journal* Vol. 2 No. 3, 1993.

7 See "East Asian integration and labor flows: The case of the Philippines" by Stella P. Go. Paper presented at the Fifth Alfonso Yuchengco Policy Conference, Makati Cty, 2008.

8 The tendency to regard Filipino overseas migration as tantamount to a brain drain is evident in most popular writings on the topic and even in some study reports on Philippine migration.

9 Studies on the social costs of migration in the Philippines may be found among those done by the Scalabrini Migration Center in the country, as those prepared by Maruja Asis and Fabio Baggio of the Center. See also, "OFW children: Wanting for more attention," *Development Research News* Vol. 26 No. 2 (March-April 2008), Philippine Institute for Development Studies.

10 See for example "The Philippine diasporic dividend: For the OFWs, their families and the country," *Development Research News,* Vol. 26 (September-October 2008), Philippine Institute for Development Studies.

11 See section on regional Overview for Asia in the IOM World Migration 2008 Report cited earlier.

12 "Brain drain in the Philippines" by Walden Bello et al., cited earlier.

13 Data on the Fulbright grants was kindly shared by Dr. Esmeralda Cunanan, Executive Director of the Philippine American Education Foundation or PAEF.

14 Accounts of the founding and establishment of the member-discipline associations of the Philippine Social Science Council (PSSC) are typically recounted in the first issue of their respective publications; while that of PSSC is given in "The Philippine Social Science Council: The first 25 years" by Bonifacio S. Salamanca, *PSSC Social Science Information* (Vol. 23 Nos. 3-4), Quezon City, 1995.

15 Loretta Sicat paper, 1976.

16 "A profile of the Philippines' social scientists" by Rodolfo A. Bulatao, Abraham I. Felipe, Andrew B. Gonzales, FSC, Consuelo L. Gutierrez, Mariano D. Obias, Bonifacio S. Salamanca and Zelda C. Zablan. In *First Southeast Asian workshop of social scientists*, Philippine Social Science Council, Quezon City, 1979.

17 Francis Madigan SJ, 1987.

18 See "RP deploying fewer maids, more professionals" by Gigi Muñoz David, *Manila Standard Today*, 9 June 2009.

19 "Filipinos in the news" by Mel Tobias, *The Philippine Star*, 21 May 2009. Tobias writes a regular column for the *The Philippine Star*, titled "Living in Canada."

20 See Opinion columns, "From brain specialists to care workers—Filipinos at ease with Britain" by Peter Beckingham, *The Philippine Star*, 23 April 2009; and *Political Tidbits* by Belinda Olivares-Cunanan, *The Philippine Star*, 28 May 2009.

21 "Jobs, jobs, jobs" in Demand and Supply by Boo Chanco, *The Philippine Star*, 7 June 2009.

22 "Remittances defy global slowdown, rise by 3.7%" by Eileen A. Mencias, *Manila Standard Today*, 16 July 2009.

23 In the same article above, Pascalla quotes DOLE officials in encouraging new graduates of all fields of engineering, information technology, and other technical fields to pursue job openings for these skills in Qatar and Norway which have expressed preference for hiring qualified Filipinos.

24 Also in Pascalla's article above.

25 Data on the Fulbright-Philippine Agricultural Program from the Philippine American Education Foundation.

26 Data on return rates of UP Faculty granted study leaves to pursue their graduate training abroad were kindly shared by Dr. Florinda Mateo, UP Diliman Assistant Vice-President for Academic Affairs and the UP Accounting Section.

27 Data from the National Science Foundation show how US higher education is able to attract, support and retain foreign S&E graduate students. The "stay-rates" of these foreign students (who come mostly from Asian countries) in the US are high. See Issue Brief (NSF 98-316).

28 The person referred to is Dr. Reynaldo B. Vea, current President of Mapua Institute of Technology. In an article carried by *The Philippine Star*, 23 April 2009 and titled "Filipino engineers: From the trenches of Zapote to all corners of the world," Dr Vea writes about "the movement towards having global standards in the practice of the engineering profession" and "the globalization of engineering education." His mission to up the standards of Philippine engineering education is in recognition of the cross-border mobility of engineers and hence, his wish that Filipino engineering graduates meet the standards of international acrreditating bodies and systems.

29 This co-author of the 1967 IPC Brain Drain Survey is Dr. Walden Bello. He teaches at the University of the Philippines Diliman, is Executive Director of Global South, and Party-List Representative of the group Akbayan.

30 A recent news account features for example, Filipino-American Dr. Samuel A. Bernal, medical doctor, lawyer, molecular biologist, and PhD and MBA degree holder. Dr. Bernal is professor of medicine, cancer director in several US hospitals (including UCLA), engages in stem cell research and bioregenerative medicine. He shares his many expertise in the Philippines in one of the country's leading hospitals, The Medical City, Ortigas, Pasig. See "Fil-Am doctor-lawyer wins landmark case" in *Human Face* by Ma. Ceres P. Doyo, *The Philippine Daily Inquirer*, 26 February 2009. His work on immuno cell therapy is also cited in "Filipino company sees RP lead in immuno cell therapy medical tourism" by Melody M. Aguiba, *Manila Bulletin*, 24 July 2009.

31 Another news account features Charles Castro, a Filipino US Air Force pilot, who has reconnected with his alma mater, Feati University, where he graduated in 1966 with a degree in Aeronautical Engineering. He is now engaged in efforts to reinvigorate Feati's aeronautical program and to bring the Philippines' aeronautics industry to a new level (beyond the repair and maintenance of commercial air craft) for the manufacture of GPS boxes and navigation devices and the development of software for training pilots. He has committed to keeping his involvement in the Philippines even as he remains a flight test pilot for the US military. See "Aiming high? Try the sky!" by Eden S. Estopace, *Starweek*, 12 April 2009.

32 Established in 1975 precisely to counter the brain drain from high-skills and talent migration, the Philippine government's Balik Scientist Program encourages expatriate Filipino science and technology experts to return to the country to share their expertise with academic, public and private institutions. In its latest count, the Department of Science and Technology reports that as many as 112 expatriate Filipinos have either returned permanently or temporarily to the Philippines in the last 34 years, to share their training and practice with institutions in the homeland.

33 "The Philippine-American Academy of Science and Engineering" by Severino L. Koh, Founding President of PAASE in PAASE's website: www.paase.org.

34 As carried in PAASE's media announcements and press releases of its 29th Annual Conference held at the Ateneo de Manila University, 13-15 July 2009.

35 See PAASE's Program and Book of Abstracts, 29th Annual PAASE Meeting and Symposium, Ateneo de Manila University, 13-15 July 2009.

36 The history and all other information on ICOPHIL are from the conference materials and programs of the 6th International Philippine Studies Conference with the theme "Turns of the centuries: The Philippines in 1900 and 2000" held at PSSC in 10-14 July 2000, and the 8th International Conference on Philippine Studies also held at PSSC and Ateneo de Manila University, 23-26 July 2008.

37 A systematic study has yet to be made on the interface between consulting work and the Philippines social sciences, although many complaints are heard about the negative impact of consulting work on the teaching assignments of social science faculty members.