

Temporary migration and the global integration of nursing labour markets – the US American instance

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Discussions around *globalization* have re-opened public debate on issues of structure and control in the capitalist world economy. As elements of popular discussion, the themes associated with *globalization* illuminate important trends but lack the explanatory power of theories and analytical frameworks. *Globalization* is thus identified as both cause and effect of a wide range of phenomena: from the development of a new geography via communication technologies to the increasing migration of workers beyond national boundaries, and from the struggle to dominate global markets to the concentration of power in the hands of a few major organizations.

Using a combination of Marxian and world historical analytical approaches, this study examines the restructuring of the nursing labour marketⁱ in the United States of America, interrogating theoretical discussions of *globalization*, within which issues of labour migration and gender arise. More specifically, two overlapping processes accounting for the increased flow of temporary migrant nurses to the USA are traced to highlight the contradictions of monopoly capital underlying labour market changes which tend to be simplistically attributed to *globalization*.

In brief, the argument is as follows: the escalation of US health care costs, identified as such in the 1970s, lead, by the 1990s, to cost-saving strategies in US health care delivery based on the intensified exploitation of female labour, including temporary migrant nursing labour. The temporary nature of this labour migration is of central importance. That is, the phenomenon of nurses

migrating on the basis of temporary work authorizations which attach the legal status of workers to particular employers, or/and particular positions of employment.

Temporary migration contrasts with *permanent residency*, which, in countries such as the United States of America, Canada, and Australia, involves full legal protections, formal citizenship rights, mobility rights, and in most cases, a path to family reunification for internationally-trained workers. From the early 1990s, temporary migration became an increasingly important means of importing internationally-trained nursing labour to expand labour supply in the USA, and other countries of the global North. It is argued here that the continually growing use of temporary migrant nurses in the USA and elsewhere signifies the *global integration of nursing labour markets*. This integration is based on the expanding production, circulation, and use of temporary migrant nurses, a labour force lacking the legal guarantees of human and workers' rights protection by states. The pending outcome of this integration is the significant weakening of nurses' unions globally, and the corresponding strengthening of employers of nurses throughout the world economy.

The analysis is divided into three sections. The first section provides an overview and critique of perspectives constituting the *globalization debate*, within which issues of labour migration and gender arise. Following from the critique, Marxian and world historical approaches to global economic restructuring are presented, laying bare the theoretical framework of this study. The second section exposes the interplay, over time, of key sub-sectors of the US health care industry. It is argued that the principal cause of cost escalation in US health care is the monopoly structure of production of medical technology. In essence this process is part of the story of the

commodification of health care, an evolution which is subconsciously overlooked due to the impervious nature of the place of scientific medicine in North American culture today.¹

The third section traces the response of US hospitals to cost escalation. It is argued that given the political impossibility of dismantling monopoly structures within twentieth century capitalism, US hospitals targeted labour costs in the attempt to counter crippling cost escalation. From the early 1990s, a growing proportion of relatively high cost registered nurses – a group of workers which had become increasingly unionized – were replaced with relatively low cost practical nurses, vocational nurses and nurses aides.² As part of this restructuring of nursing work and relations between labour and employers, nursing labour from other countries, specifically workers entering the USA on temporary work authorizations, became viewed by employers in the health care industry as a strategic source of nursing labour.

Section 1. The *globalization debate*

Cochrane and Pain outline three overarching approaches in what they term the “debate on globalization.” The *globalists*, according to these authors, see *globalization* as a tangible, inevitable phenomenon which cannot be influenced by traditional forms of human intervention. These forms include long-standing political institutions, particularly nation-states. (Cochrane and Pain: 2004, 22)

¹ The commodification of health care in the USA may be traced back to the first decade of the 20th century, when the American Medical Association, the American Pharmaceutical Association, the National Association of Retail Druggists, and the American Hospital Association came together to seize the delivery of health care away from the domestic sphere, where women performed this role using past knowledge, medicinal herbs, and by the 1860s, concoctions produced by the patent medicine industry. (Weiss: 1997, 1-5) Given the topic here, the discussion is limited to the deepening commodification of health care from circa 1950.

² The term, *nursing labour market*, is used here, as in other US American studies incorporating a labour perspective, to refer to Registered Nurses, licensed practical nurses, and nurses’ aides. See for example, *Downsizing the hospital workforce* (Aiken, Sochalski, Anderson: 1996).

The *inter-nationalists*, according to Cochrane and Pain, disagree that there is evidence of a systematic shift in social relations. They emphasize continuities between past and present, including the continuing significance of nation-states. (Cochrane and Pain: 2004, 23)

Transformationalists, in this characterization of approaches, recognize a considerable shift, but argue there is still considerable scope for intervention by national, local and other agents. (Cochrane and Pain: 2004, 23)

Kelly and Prokhovnik elaborate further on the positions of *globalists vis à vis economic globalization*. They cite five drivers of change identified by *globalists* as making for the creation of a single world economy. These drivers of change are: increasing international trade due to decreasing trade barriers between nations, increasing financial flows via foreign direct investment and technology transfers, increasing communication via the Internet and other media, technological advances allowing for the coordination of operations of multinational corporations, and increased labour mobility. (Kelly and Prokhovnik, in Held: 2004: 90,91) For *positive globalists*, all states and peoples will benefit from these changes in the long term. (Kelly and Prokhovnik: 2004, 104)

Saskia Sassen, labelled a *pessimistic globalist* by Kelly and Prokhovnik, highlights three principle ways in which women's inequality is reinforced through *economic globalization*. First, the expansion of export-oriented, cash crop production puts further pressure on women, whose labour in subsistence agriculture and household production subsidizes the wage labour of men in cash crop production. Second, the internationalization of manufacturing is directly dependent on the unregulated, exploitative use of female labour, in particular, rural women previously not integrated in industrial production. And third, *economic globalization* is causing new patterns of migration in

which female migrant workers face the *double-disadvantage* of sex and class in terms of remuneration, job opportunities, and legal status. (Sassen: 1998, 112-116).

Contrasting with the *globalists*, the *transformationalist* view of *economic globalization* rejects the assertion that *globalization* is inevitable, stressing rather that global economic forces can be resisted and transformed by states and other actors. (Kelly and Prokhovnik: 2004, 105)

Transformationalists underline a redefinition of the role of national governments which is currently unfolding, from the “interventionist, redistributive state” to the “intelligent state.” (Kelly and Prokhovnik: 2004, 106) Such an intelligent state invests in human capital and technical skills, for example, playing a “strategic” role of coordination to help increase competitiveness of national economies rather than providing “passive” welfare benefits. (Kelly and Prokhovnik: 2004, 106)

Transformationalists stress the formation of regional trading blocs as an aspect of *economic globalization* which may be harnessed by states to their own benefit. They point to three main blocs: ‘NAFTA’ (based on the USA), the European Union, and ‘East Asia’ (based-on Japan) – within which intra-regional trade has been on the rise since 1963. (Kelly and Prokhovnik: 2004, 107, 108) At the same time, *transformationalists* concede that inter-regional trade has also been rising, particularly between Asia and North America. As examples of states which have been able to draw from increased trade activity while at the same time not succumbing completely to market pressures, *transformationalists* offer the cases of Malaysia with regard to capital controls, and France with regard to the limited importation of films from the USA. (Kelly and Prokhovnik: 2004, 109)

While both *globalists* and *transformationalists* take increased trade and foreign investment as evidence that major global economic changes are underway, *inter-nationalists* argue that continuities in trade and investment indicators are more compelling than changes. (Kelly and Prokhovnik: 2004, 111) In terms of the ratio of total exports and imports to Gross Domestic Product, for example, *Inter-nationalists* parallel the relatively larger ratio in Northern countries, circa 1995, to those of the early 20th century (see Table 1. below). Similarly, they argue that there has not been meaningful change in the pattern of global capital flows. (Kelly and Prokhovnik: 2004, 114, 117) Within an inter-dependent “rather than integrated” world economy, *inter-nationalists* underline that consumer markets remain primarily national, and where there is international economic governance, it is still directed by stronger, richer states and their economies, in accordance with their own interests. (Kelly and Prokhovnik: 2004, 111, 116)

Table 1: Ratio of merchandise trade to GDP (exports and imports combined), current prices

Country	1913	1950	1973	1995	2000
France	35.4	21.2	29.0	36.6	46.9
Germany	35.1	20.1	35.2	38.7	55.8
Japan	31.4	16.9	18.3	14.1	15.2
Netherlands	103.6	70.2	80.1	83.4	106.9
United Kingdom	44.7	36.0	39.3	42.6	43.0
United States of America	11.2	7.0	10.5	19.0	20.7

Source: Thomson, 2000, page 97.

Inter-nationalists make a distinction between multinational corporations (MNCs) and transnational corporations (TNCs): the former are based in one country with operations in one or more other countries, while the latter have full foreign manufacturing capacity without a national base. Given that genuine TNCs are few in number, *inter-nationalists* argue that states are still able to regulate MNCs. Where they do not, it is because richer states (the home base of MNCs) choose not to, all

of which is a reflection of how rich states are the principal decision-makers and benefactors of increased trade and production. (Kelly and Prokhovnik: 2004, 113-117)

From this overview of the *globalization debate*, what is clear is that the main questions of concern are of existence and agency: *is there increasing global economic integration, does the state have agency, and, to a lesser extent, do communities have agency*. Oddly enough, though the subject matter is *economic globalization*, both *globalists* and *transformationalists* assume *global economic forces* as given – mostly on the basis of time series data – failing to analyze the actual economic activity, or, in Marxian terms, the social relations underlying the figures. How, for example, did MNCs and TNCs become *global economic forces*? How has labour become more mobile? What is the appropriate historical timeline to trace these processes?

In taking early 20th century figures as evidence that trade was once as important as it is currently in rich countries, and in arguing, in turn, that there is more continuity than change in the international economy of today, *inter-nationalists* fail to explain the changes which did occur in the interim. More specifically, *inter-nationalists* neglect to analyze why the ratio of trade to GDP was notably lower for at least two decades: the 1950s and 1960s.

In taking early 20th century figures as evidence that trade was once as important as it is currently in rich countries, and in arguing, in turn, that there is more continuity than change in the international economy of today, *inter-nationalists* fail to explain the changes which did occur in the interim. More specifically, *inter-nationalists* neglect to analyze why the ratio of trade to GDP was significantly lower for at least two decades: the 1950s and 1960s. In emphasizing the ever-dominant role of 'richer states,' they tend to over-generalize on the nature of relations between countries of the

global North and the many countries of the global South. Several states of the Global South exercised active economic planning and policy-making in the post-Independence decades of the 1950s, 1960s and 1970s, some of which led to an altering of world economic relations, of which the economic rise of South Korea, Taiwan, Singapore, and China are a few examples.³

Rarely addressed in the *globalization debate* – reflecting, perhaps, the historical shallowness of this debate – are the theories of global restructuring of Marxian and world historical analysts. Beginning in the 1970s, long before the birth of the *globalization debate*, Marxian economists and critical political economists postulated a structural change in the world economy, circa 1970. The varying explanations of structural change in the twentieth century world economy offer the analytical scope required to begin understanding many of the changes associated with *globalization*, including those related to labour migration. The key questions posed by these analysts are: *what exactly is happening in the world economy; why and how; and which key social agents are involved.*

Marxian economists identify this structural change through an analysis of profit rates over a 30 to 50 year time period, generalizing from the data of one or more “advanced capitalist economies.” Anwar Shaikh (1999), for example, identifies a secular fall in the profitability of US American, Japanese, and German manufacturing, from 1948 to 1982, due to a fall in output/capital ratio – the effects of which surfaced in rising unemployment, inflation, business failures, and bankruptcies globally in the 1970s and 80s. Brenner (1998) cites “unplanned for, unforeseen price competition”

³ See for example *Asia's Next Giant: South Korea and late industrialization* (Amsden: 1989). For an account of the rise of Southern mineral-rich states, see *Towards a history of top profiteers: Multinational Capitalists in the 20th Century* (Valiani: 2002). For a world-scale analysis incorporating the role of Southern states in the world economic change, see *The Long Twentieth Century* (Arrighi: 1994).

of Japanese and German manufactures as the cause of a fall in US manufacturing profitability between 1965 and 1973. The fall in one sector, according to Brenner, triggered a general fall in the rates of profit of all advanced capitalist economies, leading to global economic decline.

Building on the thesis of a crisis in profitability circa 1970, but identifying it as only one element of a structural change which continues to unfold today, Giovanni Arrighi (1994) offers a far more comprehensive explanation of shifting world capitalism. In his seminal work, the **Long Twentieth Century**, Arrighi defines a *signal crisis* of economic, political and military dimensions, in the *fourth (US) systemic cycle of accumulation*. As the latter term implies, Arrighi's notion of crisis is a systemic one, and is in turn defined from the point of view of the leading capitalist state, often referred to as the US hegemon in world historical approaches.

In its economic dimension, the crisis involved the US state's loss of control of world production and financial flows to US American and Western European capital. This loss of control surfaced between 1968 and 1973, when currency markets in Western Europe saw a sudden, large increase in US dollar based transactions, leading to the abandonment of the gold-dollar standard, followed by the breakdown of the Bretton Woods system as a whole. By the mid-1970s, the total value of monetary transactions carried out in 'offshore' markets, that is, outside of the USA and therefore beyond the jurisdiction of US law, amounted to several times the total value of world trade transactions. This swelling of financial transactions relative to trade transactions continued into the 1980s, such that by 1984, foreign exchange trading – once again, beyond the control of any state power – amounted to 35 trillion USD, while total world trade amounted to a mere 1.8 trillion USD. (Gilpin: 1987, as cited by Arrighi: 1994, 299)

Arrighi attributes the massive accumulation of capital underlying the increase in financial transactions to the intensified investment and profitability of large capitals, predominantly via US American and Western European corporations, in the 1950s and 1960s, the height of the *material expansion* within the fourth systemic (US) cycle of accumulation. Clearly this massive accumulation of capital could not continue indefinitely. Arrighi cites the outpacing of gains in labour productivity by rising real wages in North America and Europe, combined with “strong upward pressure on the purchase price of primary inputs”, as the reasons for “a major contraction in returns to capital”, beginning in 1973. (1994, 304)

Section 2. Cost Escalation in US health care

In order to arrive at the causes of US health care cost escalation, which began surfacing and was identified as such in the 1970s, it is necessary to trace back to the 1950s and 1960s, during which the birth of public health insurance programs followed important innovations in medical technology. As part of what Arrighi's (1994) *material expansion* of the *fourth (US) systemic cycle of accumulation*, breakthroughs and the spread of new technologies occurred in the health sector, beginning circa 1950. Kidney transplant and dialysis therapy – practices which are commonplace today - came into being in the early 1950s, followed by the spread of post operative recovery rooms and mixed intensive care units, through the 1950s and 60s. On a similar scale, respiratory therapy, diagnostic radioisotopes, and electroencephalographs spread through the 1960s and early 1970s. (Russell: 1979, 41-84)

Responding to a broad-based social struggle undoubtedly linked to the inability of average US Americans to meet the costs of technology-enhanced health care, Medicare and Medicaid were established by the US federal government in 1965. Medicaid, a state-administered program varying

with the particular needs of states, was designed to cover the costs of care for three major groups: low-income elderly US Americans, persons with long term disabilities, and low-income children and families.⁴ Medicare, on the other hand, was designed to cover most of the costs of medical care for the elderly and certain groups of people with disabilities, but also came to cover the costs of medical equipment and supplies.⁵ In 1973, for example, a law was enacted to extend Medicare coverage to hemodialysis, the new treatment for chronic renal failure costing 40,000 USD per year, per patient, in 1972 terms. (Weiss: 1997, 132)

By the mid-1970s, “third party payers” —more specifically, health insurers, including public health insurance programs— covered 90% of US hospital costs, as opposed to less than 50% previous to the establishment of Medicare and Medicaid. (Russell: 1979, 2) The daily cost of hospital stay increased from 14 USD per patient in 1950, to 151 USD per patient in 1976. (Russell: 1979, 1)

Between 1975 and 1980, open heart surgery technology was diffused, including electronic monitoring devices, defibrillators, respirators, pump oxygenators, and cardiac catheterization labs. (Russell: 1979, 106-110) The Office of Research and Statistics of the Social Security Administration noted a sharp increase in total US health expenditures between fiscal years 1974 and 1975: an increase of 13.9 per cent, despite mandatory economic controls imposed on the health industry in 1974. (Willis and Zubkoff: 1976, xiii) In tandem with this, public expenditures on

⁴ In detail, Medicaid covers the costs of long-term care for low-income elderly US Americans, medical care and nursing home services for persons with mental disabilities, substantial vision impairment, and permanent disabilities, and low-income children and families. (Blendon et al.: 1993, as cited by Weiss: 1997, 178)

⁵ Though mediated through private health insurers since its onset, Medicare covers most of the costs of inpatient hospital care, hospice care, skilled nursing home care, and home health care for elderly US Americans and certain persons with disabilities. Additionally, for these same groups of the population, Medicare covers the costs of physician and outpatient hospital services, durable medical equipment, and other medical services and supplies. (Weiss: 1997, 153)

health care increased in fiscal 1975 by 22 per cent, as compared to 12.3 per cent in fiscal 1974.

(Willis and Zubkoff: 1976, xiii)

Within US health care expenditures, hospital care constituted the largest relative portion in 1974: about 40 per cent. (Social Security Bulletin: 1975, as cited by Altman and Eichenholz: 1976, 8) It follows then to ask, what were the factors contributing to hospital cost increases for the period in question, 1950-1973?

Factors Contributing to Hospital Costs: Average Annual Percentage Increase

	1950-60	1960-65	1965-67	1967-69	1969-71	1971-73
Total Increase (%)	7.5	6.7	10.3	13.8	14.8	11.5
Increase in wages and price	3.8	3.5	4.1	8.0	8.2	5.9
Wages	5.2	4.7	4.7	9.9	10.0	6.6
Prices	1.5	1.3	2.9	4.8	5.1	4.9
Changes in services	3.7	3.2	6.2	5.8	6.6	5.6
Labor	3.1	1.7	3.8	2.8	3.7	2.3
Other	4.6	5.6	9.6	9.8	10.3	10.2

*Source: Data from Consumer Price Index, Bureau of Labor Statistics, and Hospital Statistics, as presented by Altman and Eichenholz, 1976, 15.

As Altman and Eichenholz underline, the following key aspects of hospital cost increases may be drawn from the figures in the table above:

1. Although significant, wage increase in the post-Medicare period did not account for all of the growth in payroll expenses; much of the increase resulted from increases in the number of hospital employees.
2. Nonpayroll expenses grew more rapidly in the post-Medicare period than did payroll expenses. Price increases of supplies, services, and equipment also did not account for all of that increase. New technology, capital-for-labor substitution, and a higher level of usage contributed to the overall rise. (Altman and Eichenholz: 1976, 14)

How did hospitals cope with such cost increases, which continued to grow at a markedly greater rate than costs of other commodities? During the 1980s, Weiss notes, on the basis of U.S. General

Accounting Office data, that hospital operating cost increases surpassed the general rate of inflation by 63 per cent. (Weiss: 1997, 75) Though Weiss does not make the connection, hospitals increasingly could not cope, resulting in the closure or/and merging of hospitals, and the centralization of capital in the hospital sector as a whole.⁶ Weiss does, however, provide substantial evidence for this connection.

While in 1961, for example, there were five hospital consolidations, by 1973, there were about 50 hospital consolidations annually. (Weiss: 1997, 70) Through the 1980s, 550 community hospitals failed and several hundred merged, facing escalating costs as well as fiscal crises due to reductions in federal financing. (Weiss: 1997, 67) Almost concurrently, between 1978 and 1984, the number of corporate-owned hospitals more than doubled, increasing from 445 to 955. (Lindorff: 1992, as cited by Weiss: 1997, 71) By 1980, according to a survey of the American Hospital Association, non-profit multihospital systems controlled 57.6 per cent of hospital beds, state and local public hospitals controlled 7.3 per cent, and investor-owned multihospital systems 35.1 per cent of beds. (Starr: 1982, as cited by Weiss: 1997, 70)

Through centralization, profitability in health care delivery was maintained, despite continuing high hospital cost increases, amounting to 7 per cent in 1988. (US General Accounting Office: 1992, as cited by Weiss: 1997, 76) In that same year, investor-owned multihospital systems generated \$6.35 billion USD in pre-tax profits. (Lindorff: 1992, as cited by Weiss: 1997, 71)

⁶ The centralization of capital refers to the gathering of different forms of already-existing capital – in this case, most notably, buildings, health care delivery operations, and machines - by a decreasing number of capitalists. (Sweezy: 1942, 254-255)

While the question of the forces causing hospital cost increases seems logical to ask, after the early 1970s policy debate encapsulated in the 1976 edited volume, **Health: A Victim or Cause of Inflation** (cited above), the question was not widely addressed again until the 1992 publication of an article in the **Journal of Economic Perspectives**. In the article, “Medical Care Costs: How Much Welfare Loss”, economist Joseph Newhouse points to the “march of science” – defined by Newhouse and others as new types of physical capital and new procedures – as accounting for the bulk of health expenditure increases for the period 1940-1990. (1992, 11)

Using a variety of calculations and simulations, Newhouse attributes “well under half – perhaps under a quarter” of health expenditure increases to the following factors: increasing insurance coverage, increasing income, ageing of the population, and physician-driven demand. (1992, 10-11) By the year 2000, citing Newhouse’s study, as well as nine disease-specific studies of medical technology, the Technical Review Panel on the Medicare Trustees Reports found that “the primary long run determinant of real health care spending has been the development and diffusion of new medical technology.” (2000, 31)

Analyzing the health insurance industry – commonly cited as the primary force in escalating US health care costs – Newhouse argues that insurance companies in the early 1980s were themselves attempting to deal with unbridled rising costs, as were managed care companies (i.e. health maintenance organizations - HMOs) shortly thereafter. Demonstrating this, Newhouse cites a study finding that between 1982 and 1984, the portion of insurance firms without cost-sharing instruments (i.e. deductibles) fell from 70 per cent to 37 per cent. Newhouse further cites that in the same period, 1982-1984, the portion of insurance companies charging deductibles of 200 USD increased from 4 per cent to 21 per cent. (Goldsmith: 1984, as cited by Newhouse: 1992, 14) As

for HMOs, Newhouse argues that despite a system of monthly fixed fees, per enrollee, costs grew at a rate proportionate to that of aggregate health expenditures. (Newhouse: 1992, 14)

The next logical question, though not often posed, and rarely answered, is *why does the “march of science” cost so much?* As alluded to in the introduction, it is perhaps due to the preponderance of scientific knowledge in US American culture that there is little elaboration around this question. A look, however, at the industry structure and pattern of profitability of medical device and diagnostic producers helps locate an answer.

At year end 1991, corporations producing measuring, scientific, and photographic equipment (U.S. Industry Code Number 38) —among them, medical technology producers Eastman Kodak, Bausch and Lomb, and United States Surgical— saw a 16.3 per cent increase in profits, second only to the 27.3 per cent increase in profits of tobacco producers. (Fortune: 1992, 287) Taken individually, within this category of industry consisting of 19 corporations, Eastman Kodak figured first, Bausch and Lomb figured ninth, and United States Surgical figured fifteenth. (Fortune: 1992, 282)

This high and relatively rapidly rising level of profitability can be traced as far back as December 1980, when corporations in this category took third place in the list of “Changes in Profits,” registering a 24.6% increase in profits. (Fortune: 1981, 346) By way of comparison, firms producing pharmaceuticals figured seventh in the listing of “Changes in Profits”, registering a 13.8% increase in profits, between 1979 and 1980.

Why were producers of medical technology doing so well, relative to both other health care firms, and other firms in general, circa 1980? The posing of this question is crucial to uncover the

reasons behind centralization in health care delivery through the 1970s and 80s, as well as to reveal a rarely mentioned component of health care cost escalation.

Gleaning the industry data provided in a study commissioned by the Health Industry Manufacturers Association (HIMA) in the late 1990s, what is clear is that at least until 2000, a small number of firms had a high degree of control of the medical device and diagnostics industry. The structure of the US medical device and diagnostics industry, and its division of labour are as follows. Of the 5998 medical device and diagnostics companies comprising the industry of 68 billion USD, 733 companies (12 per cent of the total industry) accounted for some 80 per cent of sales, and a mere two per cent of the industry accounted for 45 per cent of total industry sales. (calculations based on U.S. Department of Commerce data presented in Lewin Group: 2000, 12, 17) In terms of size, these medical device and diagnostics companies at the top of the sales hierarchy employed 100 or more workers.

Companies employing less than 100 employees and accounting for a far smaller portion of sales, in contrast, were responsible for the largest expenditures (as a proportion of sales) in research and development (R&D). In 1998, R&D expenditures by firms with revenues of less than 5 million USD totalled 252 per cent of sales, while R&D by firms with revenues of more than one billion USD amounted only to 13 per cent of sales. (Standard and Poor's Compustat data, presented in Lewin Group: 2000, 23) Of the 56 firms having submitted "premarket approvals", or "humanitarian device exemptions" (often considered proxy for innovative products) to the Food and Drug Administration in fiscal 1998, 26 per cent employed less than 100 workers, and 25 per cent employed between 100 and 500 workers. (FDA, as cited by Lewin Group: 2000, 24) As the Lewin Group explains, this

rather extreme imbalance was functional for all involved, though more beneficial to some companies than others:

Start-up firms have been disproportionately responsible for the innovation and early development of truly novel devices, including angioplasty catheters, artificial joints, cardiac support devices, diagnostic ultrasound....larger firms are more likely to pursue next-generation or incremental improvements, for example, by refining or building on current product lines....

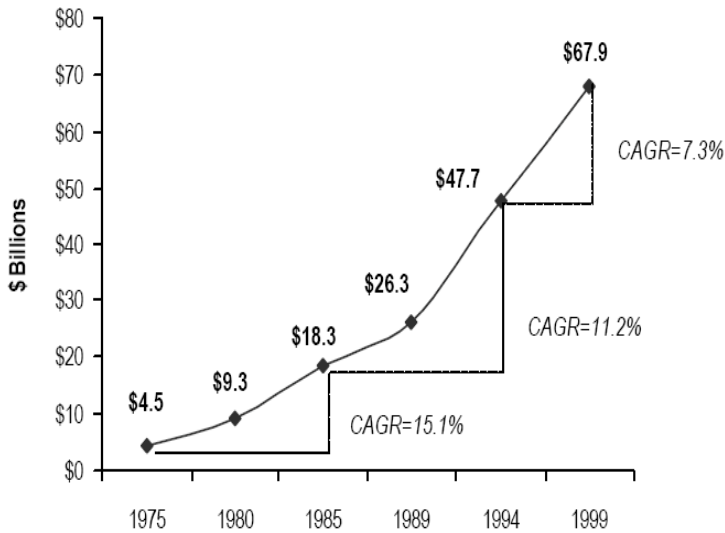
Although small companies may be responsible for early innovation, many will ultimately collaborate with larger partners to bring their products to market. Larger companies offer steady funding, opportunities for technological synergy, manufacturing capability, marketing, distribution channels, and field service. More frequently than small ones, larger companies have the experience and capacity to conduct clinical trials and take on regulatory and payment hurdles. (Lewin Group: 2000, 24)

Though not precisely in the same form, the structure and division of labour of the 20th century medical device and diagnostics industry fall well within the dynamics of what Paul Sweezy has termed *monopoly capital*. Underlining a new trend from the last quarter of the 19th century, Sweezy identifies the development of "combinations" by corporations consciously attempting to control competition. (Sweezy: 1942, 263) Baran and Sweezy further clarify that unlike the nineteenth century, in which the typical economic unit was the small firm producing "a negligible fraction of homogenous output for an anonymous market", in the twentieth century, the typical unit is the large-scale enterprise producing a substantial share of the output of one or several industries and able to control its prices, volume of production, and types and amounts of investment. (Baran and Sweezy: 1966, 6)

Through collusion, then, to control a) the direction of innovation, b) the manufacturing, marketing, and expansion of product lines, and c) industry relations with health sector regulators and with hospitals, the major consumers of medical technology — a small number of medical device and diagnostics producers were able to expand the US market for medical device and diagnostics in

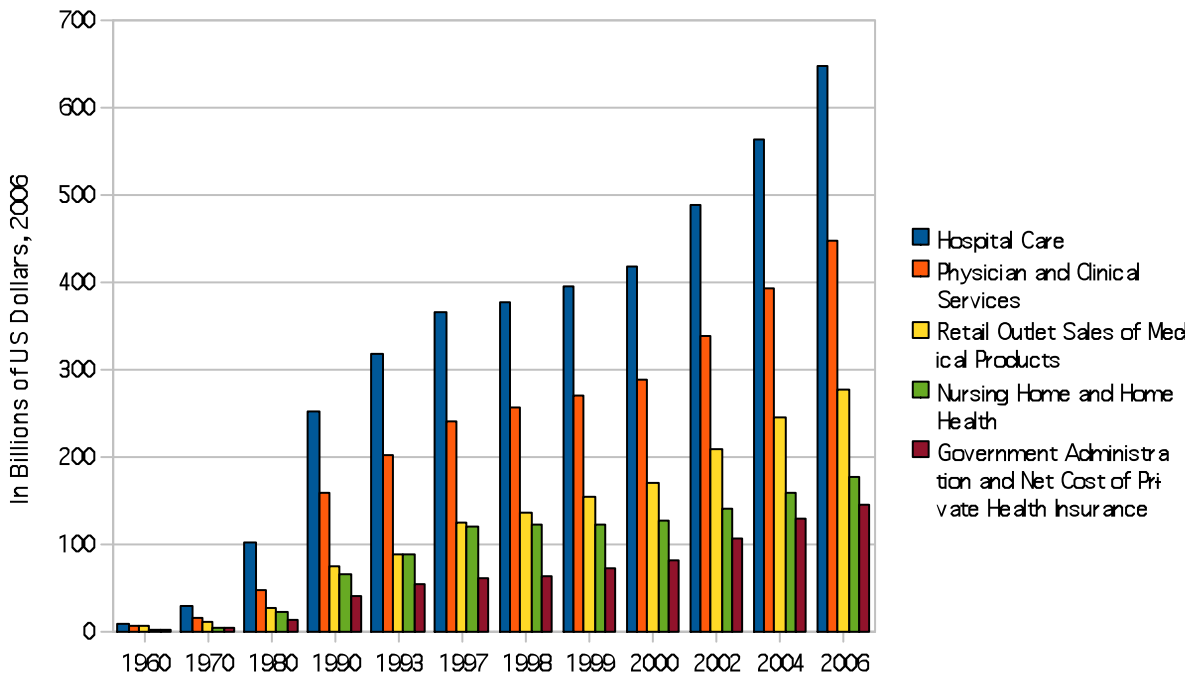
double digit figures, from 1975 and 1994. (see the figure below, where CAGR refers to 'Compounded Annual Growth Rate', as reproduced from Lewin Group: 2000, 13)

Figure 2. U.S. Market Size for the Medical Device and Diagnostics Industry



Source: U.S. Department of Commerce unpublished data

Examining official national health expenditure data confirms that along with the producers of prescription drugs – an industry more widely known for its monopoly structure and impact on health care costs – producers of medical devices and diagnostics have played a leading role in US health expenditure increases from 1960 to present. As shown in the chart below, the official category, 'Retail Outlet Sales of Medical Products', which includes both the pharmaceutical and medical device and diagnostics industries, figures third in the top five areas accounting for some 80 per cent of US health expenditures, over time. The expenditure impact of the medical device and diagnostics industry monopoly can also be traced within the second highest area of health expenditures, 'Physician and Clinical Services', given that the large firms placing medical devices



*All five areas are official categories or sub-categories accounting for the largest proportions of national health expenditures, ranging from a total of 81% (1960) to 85% (2000).

Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

on the market are in many cases the main providers of the clinical services that must accompany the devices.⁷

Rather than simply the "march of science," then, pushing-up US health expenditures in the fourth (US) systemic cycle of accumulation, this analysis demonstrates how capital was able to manipulate the opportunity provided by public health programs — hard-won, no less, by working people — to expand two industries and their profitability, regardless of the far-reaching costs involved for the US state and US society as a whole.

Section 3. Countering Crippling Cost Escalation: Hospital Labour Restructuring

As demonstrated above, open discussion of monopoly structures and their implications is essentially non-existent in the discourse of 20th century capitalism. The notion of "economies of

⁷ See for example Rudolph Daniels article, "Legislation and the American Dialysis Industry: Some Considerations about Monopoly Power in Renal Care," **American Journal of Economics and Sociology**, vol. 50, no. 2 (April), pp. 223-242.

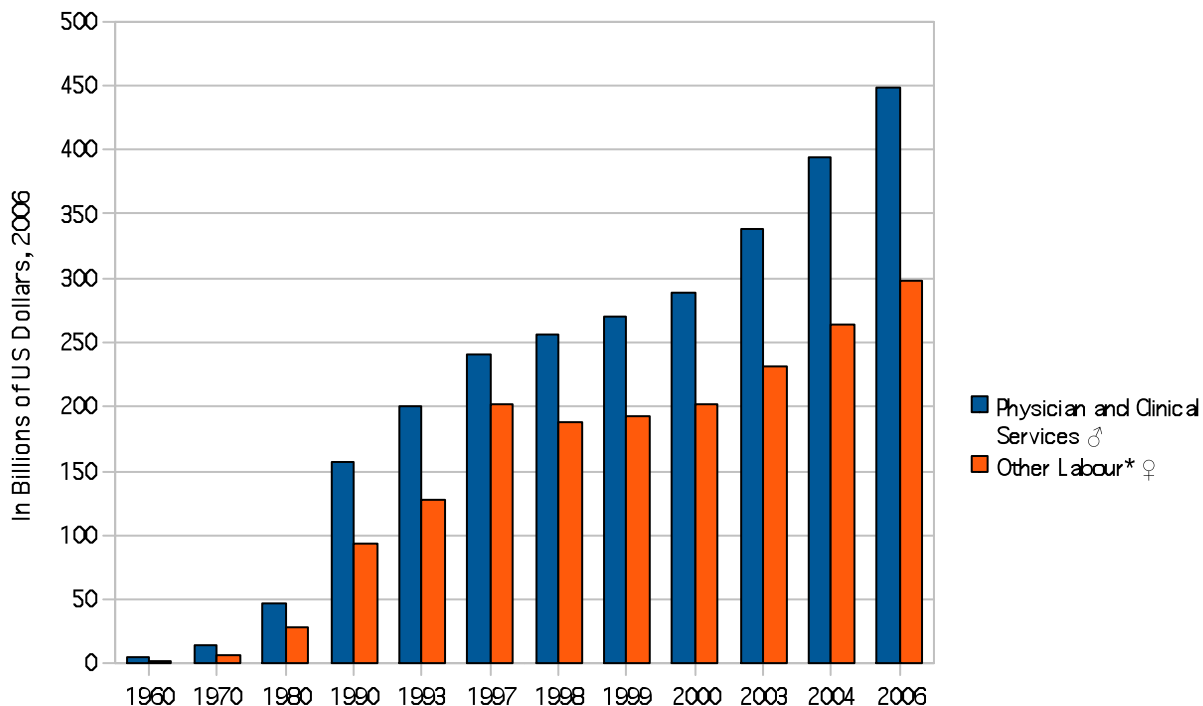
scale” is used as justification for “technical monopoly” in the production of health care, as well as other technologies. A quote from Milton and Rose Friedman (1980) exemplifies this line of reasoning:

...technical considerations make it more efficient or economical to have a single enterprise rather than many. There is unfortunately no good solution for technical monopoly.
(Friedman and Friedman: 1980, as cited by Daniels: 1991, 233)

The denial of the negative social implications of monopoly within twentieth century capitalist discourse is emblematic of one of the many underlying conflicts irresolvable within a capitalist organization of society. Where the survival of individuals becomes dependent on commodities and services produced by private interests, the control of production lies fundamentally with those private interests, rather than with the state. The state – itself dependent on commodities and other outcomes of the production of capitalists – must then defer primary decision-making around production to those private interests, regardless of the fact that profit accumulation, rather than collective good, is the end goal of private interests.

In analyzing and finding solutions, then, for cost escalation in US hospitals, it follows that hospital administrations, by the late 1980s and early 1990s, did not identify the monopoly in medical technology as the area requiring change. Where did the majority of US hospital administrations seek to make cost-cutting changes? Adopting a micro-level solution to a macro-level problem, hospitals looked to the restructuring of labour to counter crippling cost escalation. Despite the fact, however, that the cost of services of the male-dominated segment of health care – physician and clinical services – considerably surpassed the cost of the female-dominated segment (see graph below), this restructuring occurred through the reorganization of work of female health labourers in the hospital setting.

Labour Costs in National Health Expenditures, Selected Years



Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group
 *Included here are the official categories of “Other Professional Services”, “Other Personal Health Care”, and “Nursing Home and Home Health”- all of which are assumed to be female-dominated. Labour costs of hospitals are not included here as disaggregated figures are not available for the official cost category “Hospital Care.” It may be assumed, however, that the labour cost structure is quite similar within the hospital setting given a very similar composition of care services.

In a 1994 survey commissioned by the American Society for Healthcare Human Resources Administration and the Hay Group, 55 per cent of the 1,036 hospitals surveyed across the USA were actively involved in “work redesign,” with a further 8 per cent having already completed work redesign initiatives. (Pierson and Williams: 1994, 30) In addition to 1,036 for-profit, non-profit/secular, religious, and public hospitals across the country, the Hay Hospital Compensation Survey covered 348,000 health professionals. (Pierson and Williams: 1994, 29)

Of the 55 per cent of surveyed US hospitals undergoing redesign initiatives, 42 per cent had created new, team manager positions, 48 per cent had developed team care deliverer positions, and 35 per cent were “enhancing” the role of Registered Nurses to include advanced technical care and management skills. (Pierson and Williams: 1994, 30)

Along with these work redesign initiatives, the Hay Hospital Compensation Survey reported that hospitals were replacing remuneration structured on base salaries with new “compensation strategies” rewarding “performance.” The “Glossary of Compensation Strategies” included in the article of Pierson and Williams, *Compensation via Integration* – cover story of hospital industry journal, **Hospitals and Health Networks** – features such “strategies” as “broadbanding” or, the grouping of jobs and roles into few but wider pay ranges, “team-based pay”, “gainsharing” and “pay for skills.” (Pierson and Williams: 1994, 28)

In order to fully understand the reorganization of work and compensation occurring in US hospitals in the late 1980s and 1990s, a labour perspective – common in Marxian and world historical approaches but in most cases missing among *globalization* theorists – is required. More specifically, a methodological emphasis on the evolution of nursing labour organization is needed.

According to Norrish and Rundall (2001), “team nursing” was the dominant model for nursing labour organization in hospitals, prior to the 1970s. (Norrish and Rundall: 2001, 59). Nursing tasks were divided among several workers, with little regard for the nurse-patient relationship. In part as a result of the dissatisfaction expressed by nurses with the working conditions emanating from the *team nursing* model, hospitals shifted to *primary nursing* in the 1970s. In the *primary nursing* model, Registered Nurses (RNs) were given responsibility for all decision-making relating to the care of patients throughout the period of hospitalization. (Norrish and Rundall: 2001, 60) RNs thus provided direct care to individual patients from the 1970s, and were no longer required to manage the work of other caregivers, as in the *team nursing* model. Citing an article entitled “The Human Connection: Nurses and their Patients,” Norrish and Rundall further argue that for nurses, *primary nursing* espoused the essence of nursing, with its reunification of nursing tasks allowing for the

strengthening of the nurse-patient relationship. (Trossman: 1998, as cited by Norrish and Rundall: 2001, 59)

As *primary nursing* expanded as a model of hospital labour organization, demand for RNs grew through the 1980s. Concurrently, between 1981 and 1985, 42,000 of 350,000 RNs joined labour unions including major national unions such as the Service Employees International Union, the Retail, Wholesale, and Department Store Union, the American Nurses Association, United Food and Commercial Workers, and the Teamsters Union. (Weiss: 1997, 61) Along with the continued unionization of RNs into the 1990s, bargaining power of RNs increased, all against the backdrop of rising prices of pharmaceuticals, medical devices and diagnostics. From the late 1980s, hospitals thus began implementing another round of work reorganization as a cost-saving mechanism. As Norrish and Rundall (2001, 58) explain:

This rationale for restructuring emphasizes improving operational efficiency by reducing hospital costs through replacement of high-cost registered nursing staff with lower-cost license practical/vocational nurses and unlicensed assistive personnel (Greiner: 1995). This type of restructuring specifically seeks to reduce the skill mix of RNs (the number of RNs providing patient care compared with the number of total patient-care givers) and to deploy substitutes for RN caregivers wherever possible.

The new “compensation strategies” adopted by US hospital administrations become more clear as the increasing bargaining power of RNs and the evolution of nursing work organization are taken into consideration. The return to the *team nursing* model, in the late 1980s and early 1990s, went along with the notion of offering rewards and incentives to particular individuals and groups of workers in place of pay structures negotiated through collective bargaining. *Team-based pay* and *gainsharing*, thus went hand-in-hand with the redefining of RN roles to include management skills, the creation of team management positions, and the creation of team care deliverer positions.

Similarly, *competency-based pay* and *pay for skills* were means of dividing a sector of increasingly unionized workers by favouring individual workers or/and teams deemed exceptional by employers.

The increased use of temporary migrant nursing labour was part and parcel of the re-adoption of the *team nursing* model in US hospitals. Migrant RNs were imported in relatively large numbers between 1992 and 1995 (see Table below), replacing what were regarded as *high cost* RNs due to salaries and working conditions negotiated through collective bargaining.⁸

Migrant workers admitted to USA on temporary work visas, Selected Years

VISA Type	1985	1989	1990	1991	1992	1993	1994	1995
Registered Nurses (H1A)	X	X	X	2,130	7,176	6,506	6,106	6,512
	1996	1998	1999	2000	2001	2002	2003	2004
Registered Nurses (H1A)	2,046	551	534	565	627	1,145	924	7,795
Occupations in Medicine and Health (H1B-07)**	X	X	X	10,065	11,334	12,920	15,623	17,676

Sources: Yearbook of Immigration Statistics, 2004, and INS Statistical Yearbook of the Immigration and Naturalization Service for the years 2000-2006.

* Disaggregated data for H1B visas is not available or/and reliable for the years prior to 1999.

** For the years included here, the proportion of 'Physicians and Surgeons' (sub-category 070) ranged from 39% to 48% of the total H1B visas approved in 'Occupations in Medicine and Health.'

Other migrant nurses – licensed practical nurses, vocational nurses, and nursing assistants – increasingly entered the USA on temporary work visas from the year 2000 (see “Occupations in Medicine and Health” in Table 2). Though migrant nurses do not constitute a particularly large proportion of the total nursing labour force, their presence has made for an important qualitative

⁸ As with most cost-cutting strategies of capitalists, the use of temporary migrant nurses at differential wage levels was not a new idea in the US hospital sector. In *Empire of Care*, a historical study tracing 100 years of nurse migration to the USA from the Philippines, Catherine Choy (documents anecdotal evidence of hospital administrators in the 1950s and 1960s assigning temporary migrant nurses the work of registered nurses while compensating them merely with the stipend required by the Exchange Visitor Program through which they were entering the USA. Demonstrating the wage differential, Choy documents that in 1960, the wage of a general duty nurse in a Philadelphia non-state hospital was \$71.50, while the wage of an exchange (temporary migrant) nurse in the same hospital was \$46.50. (Choy: 2003, 78, 79)

difference. Employers have been able to advance the reorganization of nursing work and implement additional cost-cutting measures by offering differential rewards and working conditions to nurses on the basis of legal status and country of training, leading to the further deterioration of working conditions and rights for all nurses in the USA.⁹ In greater detail, temporary work permits necessitate temporary contracts – the combination of which makes for the relatively lower cost of migrant nurses, whose contracts may be determined by employers and states outside of the collective bargaining process.¹⁰

Needless to say, despite the restructuring of the nursing labour market – that is, reducing costs through the wages of workers providing the most ongoing and therefore essential care for the ill – hospital care and other major health expenditures continued to increase into the early 21st century (refer to Figure on page 13). In addition to speaking to the poverty of solutions offered through capitalist reasoning, this attests to the intertwined nature of patriarchy and capitalism in US society.

Theoretical Reprise

The methodological approach exemplified here – analyzing the dynamics of capital and labour within a particular sector, over time – helps to expose the causes underlying changes surfacing in the 1990s, commonly attributed simply to *globalization*. In more detail, because of unrestrained cost increases inherent in the monopoly structure of medical technology production, employers in

⁹ In a 2008 workshop entitled “Health, Globalization and Migration: Issues and Struggles of Migrant Health Workers”, Naida Castro of the National Alliance for Filipino Concerns, detailed several complaints of workplace discrimination filed by migrant nurses to the U.S. Equal Employment Opportunities Commission. (International Assembly of Migrants and Refugees, October 30 2008, Bayview Hotel, Manila, Philippines). See also M. Kingma’s (2006) **Nurses on the Move: Migration and the global health care economy** (Ithaca: Cornell University Press).

¹⁰ Given that collective agreements cover all domestically-based workers, even employed, internationally-trained nurses with permanent resident status fare better relative to temporary migrant nurses. This is not to say that internationally-trained nurses with permanent resident status do not face discrimination based on country of training or/and race.

US health care delivery resorted to labour restructuring in the attempt to reduce rising hospital costs, of which the increased use of temporary migrant nursing labour was one element.

The evidence provided with regard to the nature of hospital work reorganization confirms one aspect of Sassen's argument (1998) that women's inequality is reinforced by what she terms *economic globalization*. With the 1970s adoption of the *primary nursing model* and expansive growth in the unionization of RNs from the 1980s, women's caring labour in the USA gained value both in economic and social terms. Not only did increased unionization challenge the socially accepted level of RN wages, but in raising those wages – as negotiated agreements covering all workers of a specific occupation within particular workplaces tend to do – the historically undervalued, caring labour of a predominantly female workforce gained social recognition. With the restructuring of nursing labour in the late 1980s and 1990s, many of these social and economic gains were reversed. In this sense, though recognizing the relatively greater precarity faced by temporary migrant nurses in the USA, it may be said that Sassen's *double-disadvantage* of sex and class is faced by the nursing labour force as a whole.

While Sassen and other *globalization* theorists would ascribe all this simply to *economic globalization*, what is argued here is that the causes are rooted in a series of contradictions within the *material expansion* of Arrighi's fourth (US) systemic cycle of accumulation. The creation of new state health care programs in the USA of the 1960s created a new opportunity for capitalist accumulation. Mounting capitalist power resulting from the successful use of this opportunity by producers of pharmaceuticals, medical devices and diagnostics contributed significantly to increasing costs faced by US hospitals, the latter of which consequently also became new opportunities for capitalist accumulation. Unable to intervene in the process given the preponderant

power of private interests within a capitalist system, the US state facilitated the increased use of temporary migrant nursing labour as part of the labour cost-cutting solution identified by US hospitals.

The lesser relevance of the *globalization debate* around the agency of the state, under *globalization*, becomes apparent here. From at least the 1960s – long before the beginning of so-called *globalization* – the US state has been subordinate to medical technology producers, regardless of anti-trust and other legislation. The *transformationalist* argument that states are shifting from the role of redistribution to the more “strategic” role of investing in human capital is not the case observed here: rather than investing in the training of more nurses, the US has become increasingly dependent on internationally-trained nurses. Furthermore, while *transformationalists* argue for the enlarging agency of *communities* through globalization, what can be observed in the US health sector is the loss of agency of organized labour over the past 20 to 30 years – a phenomenon rarely discussed by *globalization* theorists. Sector-specific studies, within well-defined historical time frames, would help determine whether the same relations hold true for the US and other countries in other economic sectors.

In conclusion, rather than *globalization*, it is the very dynamics of capitalist organization of health care in the material expansion of the fourth (US) systemic cycle of accumulation which led to restructuring of the US nursing labour market by the late 1980s. The restructuring of a major nursing labour market in the world economy was, in turn, a principal force in the global integration of nursing labour markets. The increasing movement of temporary migrant nurses is therefore one of several outcomes of contradictory processes unfolding between the 1950s to the 1970s, or during what has been called the *Golden Age* of 20th century capitalism. Based on the analysis

provided here, a return to the social order of the *Golden Age*, as many *globalization* theorists and their followers argue, is far from the solution required.

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