

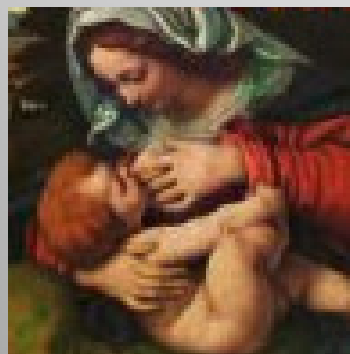


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Investing in Breastfeeding: Why, what, and a reflection



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Why invest in breastfeeding?

- **Because its cost saving**
- **Because it is economically valuable**
- **Because it has a high rate of return**
- **Because it's effective, fair and right**

- **....A dollar spent on formula adds a dollar or more to immediate health costs**
 - **In Australia , hospital system costs of premature weaning were \$60-120m pa for just 4 conditions (gastrointestinal illness, respiratory illness, ezcema & NEC)** (Smith, J.P., Thompson, J.F., and Ellwood, D.A. *Australian and New Zealand Journal of Public Health* 2002)
 - **Comparable US estimates for avoidable cost of common illnesses around \$3.6 billion pa (mainly NEC deaths)** (Weimer USDA 2001)
 - **US study showing avoidable health treatment costs including chronic illness of \$10.5 billion from poor US breastfeeding rates** (Bartick 2010 et al *Pediatrics*)



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...including on future chronic disease costs

- **US study calculates the maternal health and morbidity costs of not breastfeeding of more than \$17 billion in economic cost (premature death of mothers, and lost productivity) (Bartick 2013)**
- **UK study estimates health care system saving from increasing breastfeeding of £40 million per year including reductions in the costs of maternal breast cancer (Renfrew *et al* UNICEF UK 2012)**

Bartick, M. C., Stuebe, A. M., Schwarz, E. B., Luongo, C., Reinhold, A. G., & Foster, E. M. (2013). Cost analysis of maternal disease associated with suboptimal breastfeeding. *Obstet Gynecol*, 122(1), 111-119. doi: 10.1097/AOG.0b013e318297a047

Renfrew, M. J., Pokhrel, S., Quigley, M., McCormick, F., Fox-Rushby, J., Dodds, R., . . . Williams, A. (2012). Preventing disease and saving resources; the potential contribution of increasing breastfeeding rates in the UK: UNICEF UK.



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Breastfeeding is economically valuable

<i>Prices of mothers milk, developed countries</i>	<i>Gross Price (US\$ per Litre)</i>
Human milk bank transaction prices (2009-2012)	
USA	85
Norway	100
UK	123
Internet trading buy-sell offer prices	28-85
Commercial human milk products transaction prices	
Standardised human milk formulation	1183
Human milk fortifier	6250
<i>Input cost approach – replacement cost</i>	
Wet nurse wages sell offer prices	
USA	63*

Smith JP. "Lost Milk?": Counting the Economic Value of Breast Milk in Gross Domestic Product
Journal of Human Lactation 2013 29(4):537 - 546.

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Economic value of human milk production (0-24 months, p.a.), 2010

Country	Potential milk value <i>US\$ million^{c)}</i>	'Lost milk' value <i>(US\$ million)^{d)}</i>	'Lost milk' (% of potential^{e)}
Norway	1,505	598	40
Australia	7,601	4,016	53
United States	107,887	63,113	58
Philippines	58,797	39,701	32
United Kingdom	18,989	3,980	79
World	1,982,942	3,380,192	59

For China the economic value of optimal breastfeeding (IYCF) is potentially >\$400 billion (@ \$100 per litre). For India it is \$350 billion, optimal IYCF is potentially worth \$800 billion pa of food production value

Smith, J. P. (2012). Including household production in the System of National Accounts (SNA) ACERH Working Paper, No. 10, http://www.acerh.edu.au/publications/ACERH_WP12.pdf.

Smith, J. P. (2013). "Lost Milk?": Counting the Economic Value of Breast Milk in Gross Domestic Product Journal of Human Lactation, 29 (4), 537 - 546

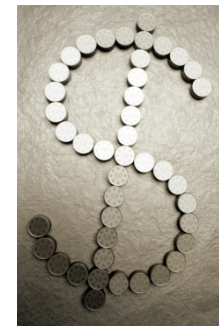


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6 months ...

Breastfeeding for at least six months helps ensure better health throughout your baby's first year of life, and reduces your own risk of breast cancer. Breastfeeding for six months or more may greatly reduce your little one's risk of ear infections and childhood cancers. And exclusive, frequent breastfeeding during the first six months, if your periods have not returned, provides 98% effective contraception.



\$20,511, or \$29,757 if you paid a wet nurse

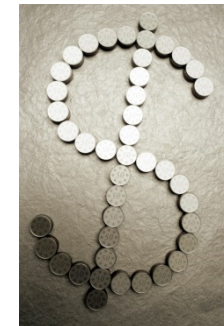


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To 2 years and beyond ...

- **Breastfeeding toddlers – upholding Australian standards?**



The World Health Organisation Gold Standard \$50,812

If your child weans when she is ready, you can feel confident that you have met your baby's physical and emotional needs in a very normal, healthy way. In cultures where there is no pressure to wean, children tend to breastfeed for at least two years. The World Health Organisation and UNICEF strongly encourage breastfeeding through toddlerhood: 'Breastmilk is an important source of energy and protein, and helps to protect against disease during the child's second year of life.' Our biology



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The returns are high...

Productivity gains of human milk for human babies



Breastfeeding exclusively to 4 months adds 3-7 points to IQ compared to exclusive breastfeeding for 3 months or less.

It is akin to the impact of low level lead exposure on child development.



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Best value investment 2013

- Lancet review team (2013) concludes that **evidence based strategies to promote exclusive breastfeeding exist and are highly cost effective in reducing malnutrition**
- **Evidence for effectiveness of complementary feeding strategies is insufficient**
- **Global progress on increasing optimal infant and young child feeding especially breastfeeding is uneven and suboptimal**
- **Potential for scaling up,**
 - including community based programs for mass implementation and conditional cash transfer programs
 - Need to address breastfeeding among underprivileged working women
- **Such strategies have wider implications in addressing economic justice for women**

Mothers invest in breastfeeding

- **Exclusively breastfeeding at around 6 months took 18 hours a week (2.6 hours a day).**
- **Exclusively mothers also had less help with feeding**
- **Mothers who invest in breastfeeding are less likely to be employed.**

<i>mean weekly hours</i>	EBF	Not EBF
Milk feeding*	18.2	11.6
Solids feeding**	0.1	2.5
Preparing feeds*	0.4	1.4
Total	18.7	15.4

Smith, J. P., & Forrester, R. (2013). Who pays for the health benefits of exclusive breastfeeding? An analysis of maternal time costs *Journal of Human Lactation*, 29(4), 547 - 555.

It's fair and right to invest in breastfeeding

- **Mothers milk has high market value and its economic contribution to GDP **can and should** be measured**
- **If it were better measured, women would be better appreciated and supported to breastfeed**
- **It is wrongly omitted from GDP, and this biases policy priorities away from women and children.**
- **We know what is effective and what to do!**

Waring, M (1988) *Counting for Nothing*. Allen & Unwin, New Zealand, Wellington.

Elson, D (2008) *The Three R's of Unpaid Work: Recognition, Reduction and Redistribution*, United Nations Development Program (UNDP), New York.

Smith, JP (in press 2013) 'Making Mothers' Milk Count'. *Counting on Marilyn Waring, M Bjørnholt & A McKay*. Bradford, Ontario, Demeter Press.



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Where to invest? Health care systems

- **Is it only the mothers responsibility?**
- ✓ **The Breastfeeding Friendly Hospital Initiative (BFHI) including referral to community support groups**
- ✓ **Maternity protection, and breastfeeding friendly workplaces**
- ✓ **Effective implementation of the WHO code**



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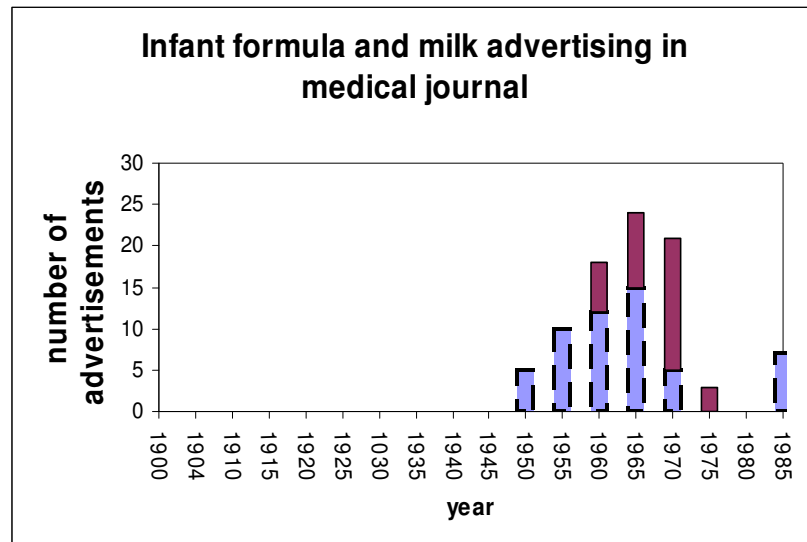
How much to invest?

- **Mothers invest in breastfeeding - 18 hours a week of their time for exclusive breastfeeding.**
- **Companies invest in promoting formula and baby food – probably in excess of \$3.5 billion a year**
- **What is governments' and international agencies co-contribution?**
 - **Governments can use effective regulation and tax measures as well as spending to invest in breastfeeding**

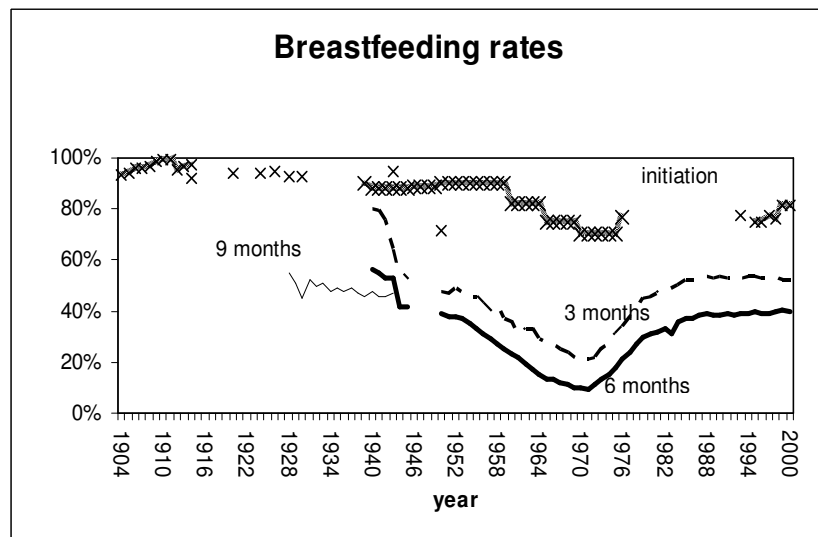
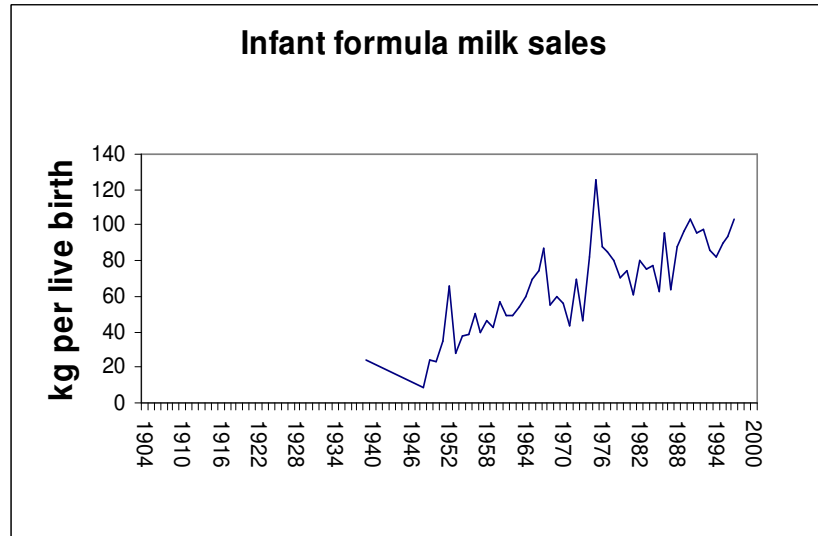
Risks of not investing in breastfeeding

- What will happen if we don't scale up investment in breastfeeding?
- **Breastfeeding will decline - it will not stay the same or go up**
- The food industry has billions of dollars at stake in sales of formula and manufactured foods for children, and is investing heavily in expanding the market for their products and thereby reducing the share of breastfeeding in infant and young child feeding
 - They are again expanding baby food sales through marketing to hospitals and health professionals, and to busy working mothers
- It is important for today's newly developing countries to avoid repeating this costly nutrition transition mistake, and also for the developed world to invest in addressing the ongoing consequences of suboptimal infant feeding practices particularly including premature weaning from breastfeeding.

Australia, 1904 to modern day



Smith, J.P. 2007. 'The contribution of infant food marketing to the obesogenic environment in Australia', *Breastfeed Rev*, vol. 15, March, no. 1, pp. 23-35.



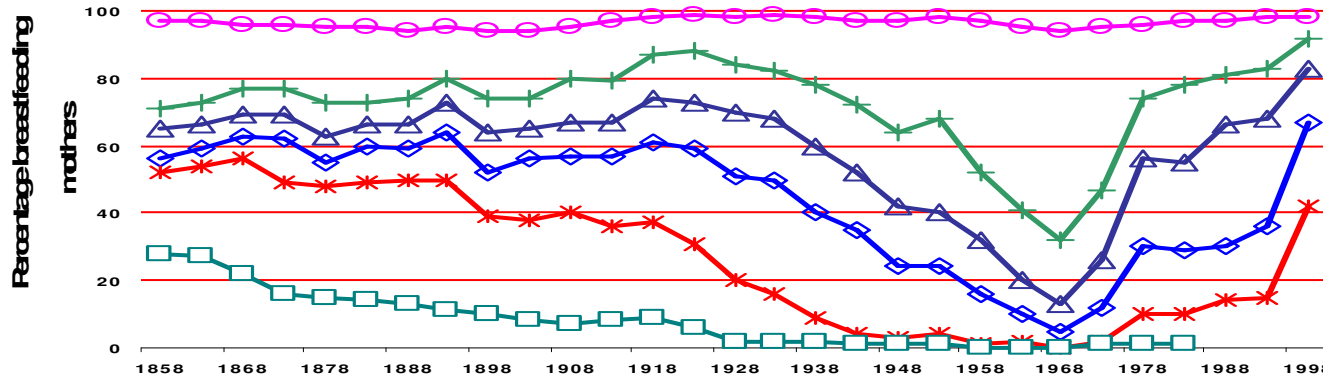


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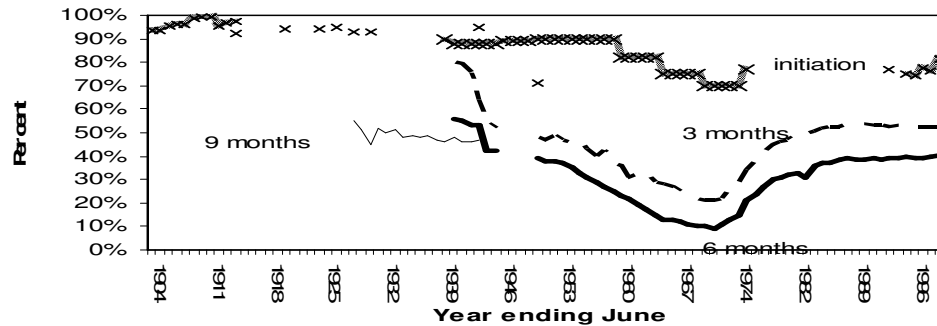
Reflection: Can we afford not to invest in breastfeeding

Norway 1858-1998

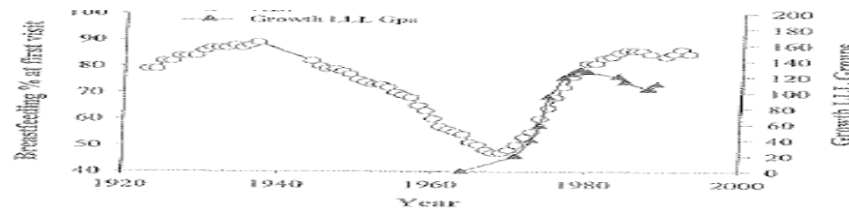


Australia 1904-2000

MASS MAMMARY MALFUNCTION! 1900-2000



New Zealand 1920-2000



USA 1965-1995



Figure 1. US breastfeeding rates 1960 through 1995.



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The End

