Enterprise Births and Deaths

Executive Summary:

- There are a large number of enterprises (businesses) starting each year.
- The failure rate for enterprises is high, around 20% across all enterprise industry categories and sizes in the first year, and around 50% by the third year.
- Ignoring the stimulating and positive effect that entrepreneurs may have on the economy by creating their money-go-round enterprises, as well as ignoring the negative impact that they have with their likely trail of creditors, on a personal level, enterprise failure most likely represents a waste of tangible wealth, time, credibility, and a host of other tangible and intangible resources and items of value.
- It is my hypothesis that with a little due diligence, say by reading my eBook *Starting a Business - With Facts, Not Faith*, or a better one, and acting on the knowledge gained, that a large amount of the wealth etc., that is currently wasted by entrepreneurs could be preserved for more fruitful endeavours.
- 85% of people believe that they are above average in any particular skillset (driving a car say). Confession - I just made those numbers up, because I can't find the original source, but they're *about right*. Here's a Wikipedia Reference explaining the effect. It's not a trick statement I made, but it does require one to pay attention and know a little about statistics - it is not possible for more than half (85%) of the population to be better than the average (50%), the other half. This *I think I am better than I really measurably are effect* (superiority bias), may be why the failure rate of enterprises is so high. After all, how hard could it be right?! Exercising due diligence is called *calculated risk-taking*, diving right in because of superiority bias is called *GAMBLING!!!*
- Always provide references to any data or information that you provide.

Discussion

Statistics NZ compiles Business Demographic data every year, covering the past February to February period. The statistics for the previous 12-month period are provided around October.

The data provided is about enterprise geographic dispersion, births, deaths, and survival rates. If one is careful about the data ranges used, then the term *enterprise* is almost equivalent to what we typically expect a *business* to be. Please see Appendix: Glossary.

Care is required when interpreting the data. For instance, the data is subject to change as time passes and final data is collected for the previous measurement period. In addition, a thorough understanding of the terms used, such as *enterprise*, for example must be gained before meaningful analysis and decision-making is undertaken.

For example, it has been reported in the *Business Mentors NZ Annual Report 2018* that "an estimated 850 new businesses starting every month." This was true for the period Feb 2016 to Feb 2017. For the following period to Feb 2018 it was approximately 800. But where do these numbers come from?

A link is provided to the latest statistics (as at July 2019, next release October 2019). By following the link you will find a spreadsheet, and in that spreadsheet *Table 7 - Enterprise births by employee count size group, at February, 2009–18*.

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In that table title alone, there are 4 important terms; *enterprise*, *births*, *employee count*, and *group* which need to be understood. Please see the Appendix: Glossary below. Important caveats are also listed under Table 7:

1. All numbers are provisional and subject to revision in the next release.
2. The largest revisions are expected in the most recent reference periods. This is mainly due to lags associated with processing administrative data.
3. Take care when analysing the 2018 enterprise births data. Data is preliminary until the February 2019 snapshot is available.

For convenience, I have provided a slightly augmented Table 7 below. In that table I have added the highlighted rows that show:

1. The total number of enterprise births per period with more than one employee.
2. The number of enterprise births in (1) per month.

Table 7

Enterprise births by employee count size group[1][2]

At February, 2009–18

Employee count size group	Reference year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018[3]
Number of enterprise births										
0	49,902	42,420	41,631	40,263	41,748	48,387	56,298	50,481	57,984	51,888
1–5	5,298	4,602	4,515	4,662	4,830	4,896	6,507	7,872	8,307	7,572
6–9	468	390	450	480	459	543	990	1,014	1,089	1,134
10–19	276	294	225	261	276	303	522	528	606	630
20–49	96	96	84	72	87	93	156	144	141	150
50–99	9	12	12	15	18	12	27	36	21	18
100+	9	6	6	9	0	9	6	9	9	6
Total births	56,061	47,820	46,926	45,759	47,418	54,240	64,509	60,087	68,154	61,404
1-100+ Totals	6,156	5,400	5,292	5,499	5,670	5,856	8,208	9,603	10,173	9,510
1-100+ per month	513	450	441	458	473	488	684	800	848	793
Percentage of total enterprise births										
0	89.0	88.7	88.7	88.0	88.0	89.2	87.3	84.0	85.1	84.5
1–5	9.5	9.6	9.6	10.2	10.2	9.0	10.1	13.1	12.2	12.3
6–9	0.8	0.8	1.0	1.0	1.0	1.0	1.5	1.7	1.6	1.8
10–19	0.5	0.6	0.5	0.6	0.6	0.6	0.8	0.9	0.9	1.0
20–49	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
50–99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
100+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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3. Take care when analysing the 2018 enterprise births data. Data is preliminary until the February 2019 snapshot is available.

Source: Stats NZ

From the table we can now see where the 850 and 800 above came from.

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However, what the numbers derived don't show is the enterprises, what we might call a business, that are trading but where an owner is not paying tax:

> EC [Employee Count] data does not include working owners, unless they pay themselves a salary or wage that is subject to PAYE. So enterprises in the zero EC size category may have:
>
> - working owners
> - labour provided by other businesses or contractors
> - business activity that requires no labour (eg passive investment). *Business Demography Statistics: At February 2018 data dictionary (version 19)*, Statistics New Zealand.

Neither does the data account for business owners who don't formally register their business, pay tax, and are otherwise invisible to Statistics NZ and therefore the government.

What this all means is that the 800 enterprise births per month is most likely an understatement of the true number of births. But does this matter?

It probably doesn't matter for our/my purposes. It doesn't make much difference to me whether there are actually 952 versus 955 enterprises starting per month. What is more important is the order of magnitude, by that I mean, is the number 9, 95, 952, 9520, or 95200 per month?

At the derived rate of around 800 per month, that is a lot of enterprises *giving it a go*, and if the individuals are performing their due diligence, then *good on them!*

But reality check time, sorry, you should have seen it coming.

Companion tables to Table 7 above are:

- *Table 8 - Enterprise deaths by employee count size group.*
- *Table 11 - Survival rates of enterprise births, by industry.*
- *Table 12 - Survival rates of enterprise births, by employee count size group*.

Table 8 is interesting in that it shows that in the 2018 period, for the 1-5 employee count size group, 3,228 enterprises died versus, from Table 7, 7,572 were born. However, as interesting as these numbers are, for example that around 9 enterprises are dying per day, we don't know when those deceased enterprises were born, and we know nothing about what type of enterprises they were. Tables 11 and 12 are of more interest as they take into consideration the birth and death dates, and therefore tell us how long enterprises are surviving.

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Table 12 below indicates that for all size-groups, only 80% survive one year and only around 50% survive for three years.

Table 12

Survival rates[1] of enterprise births, by employee count size group[2][3]

At February, 2009–18 (births in 2008–16)

Employee count size group	Reference year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Percent									
Enterprise births in 2008										
0	80	62	52	45	40	36	31	29	26	24
1–5	90	76	67	60	54	50	45	42	38	35
6–9	92	80	72	65	58	54	51	48	44	40
10–19	93	86	79	73	68	65	59	54	51	46
20–49	93	88	78	72	66	63	56	53	49	47
50–99	96	81	70	67	67	63	63	56	48	44
100 +	100	100	100	92	83	75	67	58	58	58
All size groups	81	64	54	47	42	38	33	30	28	26

1. Survival rate is the percentage of enterprise births (in the business demography population) in each reference period that survives into future reference periods (surviving enterprise births divided by total enterprise births for a particular reference period). To be a survivor, the enterprise must have existed at every reference period between its birth year and the given reference period.
2. All numbers are provisional and subject to revision in the next release.
3. The largest revisions are expected in the most recent reference periods. This is mainly due to lags associated with processing administrative data.

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Table 11 below provides the same data from an industry classification perspective.

Table 11

Survival rates[1] of enterprise births, by industry (ANZSIC06)[2][3]

At February, 2009–18 (births in 2008–16)

Industry (ANZSIC06)	Reference year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Percent									
Enterprise births in 2008										
A Agriculture, forestry, & fishing	87	75	67	61	55	51	48	44	41	38
B Mining	78	58	48	36	32	30	25	22	19	16
C Manufacturing	81	63	54	46	41	37	35	32	29	27
D Electricity, gas, water, & waste services	82	70	64	55	53	44	38	36	33	31
E Construction	79	58	47	39	35	31	28	26	24	22
F Wholesale trade	82	62	53	46	41	37	33	30	28	26
G Retail trade	81	62	51	42	37	33	29	26	24	22
H Accommodation & food services	83	67	57	49	45	40	36	31	28	25
I Transport, postal, & warehousing	81	61	50	42	36	32	28	26	23	20
J Information media & telecommunications	80	62	50	42	37	32	27	25	23	22
K Financial & insurance services	94	73	62	54	47	45	40	37	33	31
L Rental, hiring, & real estate services	79	63	55	49	45	42	34	30	28	25
M Professional, scientific, & technical services	79	59	48	41	36	32	29	26	24	22
N Administrative & support services	78	58	46	38	32	28	25	22	20	18
O Public administration & safety	75	61	51	41	33	27	23	20	15	15
P Education & training	84	65	54	48	44	38	35	33	30	28
Q Health care & social assistance	85	69	59	53	46	43	39	36	34	31
R Arts & recreation services	78	60	49	42	37	33	29	26	24	22
S Other services	81	66	56	49	44	40	36	33	30	27
All industries	81	64	54	47	42	38	33	30	28	26

1. Survival rate is the percentage of enterprise births (in the business demography population) in each reference year that survives into future reference years (surviving enterprise births divided by total enterprise births for a particular reference year). To be a survivor, the enterprise must have existed at every reference year between its birth year and the given reference year.
2. All numbers are provisional and subject to revision in the next release.
3. The largest revisions are expected in the most recent reference periods. This is mainly due to lags associated with processing administrative data.

A version of Table 11, that is sorted by failure rate in the first year, is also provided in the Appendix: Table 11 - Survival Rates of Enterprise Births.

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Appendix: Glossary

For the following terms, the reader is directed to *Business Demography Statistics: At February 2018 data dictionary (version 19)*, Statistics NZ. The full explanations are long and detailed, but for our purposes, to get a sense of the scale of enterprises coming into and then out of existence, our common understanding of the terms is usually sufficient.

Term	Definition
Birth	Birth: occurs when a new enterprise starts operation (ie a combination of production factors is created, and no other national businesses are involved). Births do not include entries into the population due to reactivations, mergers, break-ups, split-offs, or other restructuring of a group of businesses linked by ownership or control. Changes to characteristics of existing businesses are not births (this is largely based on, and fully consistent with, the Eurostat definition of enterprise births). To be a birth in the business demography population, the enterprise and associated geographic units existed at neither time T-1 year nor time T-2 years.
Death	Death: occurs when an enterprise ceases operation (ie a combination of production factors is dissolved, and no other domestic businesses are involved). Deaths do not include exits from the population due to temporary inactivity, mergers, takeovers, break-ups, or other restructuring of a group of businesses linked by ownership or control. Changes to characteristics of businesses that remain active are not deaths (this is largely based on, and fully consistent with, the Eurostat definition of enterprise deaths). To be considered a death in the business demography population, the enterprise and associated geographic units exist at neither time T year nor time T+1 year.
Economically significant enterprise	An enterprise is economically significant if it meets any one of the following criteria: annual expenses or sales (subject to GST) of more than $30,000 or 12 month rolling mean employee count of greater than three or part of a group of enterprises or registered for GST and involved in agriculture or forestry or over $40,000 of income recorded in the IR10 annual tax return (this includes some units in residential property leasing and rental).
Employee Count (EC)	Employees or employee count (EC): refers to paid employees. It is a head count of salary and wage earners sourced from taxation data. EC data is available on a monthly basis. The EC used for deriving business demography statistics is for the February month.
Employee count size groups	EC data in this release is summarised into seven employment size groups: 0 EC 1–5 EC 6–9 EC 10–19 EC 20–49 EC 50–99 EC 100+ EC
Enterprise	Enterprise: an institutional unit that generally corresponds to legal entities operating in New Zealand. It can be a company, partnership, trust, estate, incorporated society, producer board, local or central government organisation, voluntary organisation, or self-employed individual.
Group	ANZSIC06 - Australian and New Zealand Standard Industrial Classification 2006. A business is normally assigned to an ANZSIC06 category according to the predominant activity it is engaged in. ANZSIC06 is a hierarchical classification with four levels: division, subdivision, group, and class. For example, “A Agriculture, forestry, & fishing.”

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Appendix: Table 11 - Survival Rates of Enterprise Births

Table 11

Survival rates[1] of enterprise births, by industry (ANZSIC06)[2][3]
At February, 2009–18 (births in 2008–16)

Enterprise births in 2008	Percent									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
O Public administration & safety	75	61	51	41	33	27	23	20	15	15
B Mining	78	58	48	36	32	30	25	22	19	16
N Administrative & support services	78	58	46	38	32	28	25	22	20	18
R Arts & recreation services	78	60	49	42	37	33	29	26	24	22
E Construction	79	58	47	39	35	31	28	26	24	22
L Rental, hiring, & real estate services	79	63	55	49	45	42	34	30	28	25
M Professional, scientific, & technical services	79	59	48	41	36	32	29	26	24	22
J Information media & telecommunications	80	62	50	42	37	32	27	25	23	22
C Manufacturing	81	63	54	46	41	37	35	32	29	27
G Retail trade	81	62	51	42	37	33	29	26	24	22
I Transport, postal, & warehousing	81	61	50	42	36	32	28	26	23	20
S Other services	81	66	56	49	44	40	36	33	30	27
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K Financial & insurance services	94	73	62	54	47	45	40	37	33	31
All industries	81	64	54	47	42	38	33	30	28	26
Min	75	58	46	36	32	27	23	20	15	15
Max	94	75	67	61	55	51	48	44	41	38
Avg	81	64	54	46	41	37	32	30	27	25