

Analysing corpora to teach financial English Evan Frendo









What is a corpus?

A collection of texts, spoken or written, held in electronic format.

Cambridge English Corpus

Business English

The Cambridge Business English Corpus is 200 million word collection of written and spoken texts from, or relating to, the world of business.

The Corpus is drawn from a range of global sources and includes business meetings, minutes, reports, proposals, presentations, and articles.

What's in the Cambridge Business English Corpus?

The Cambridge Business English Corpus is made up of two parts:

- Spoken Business English The Cambridge and Nottingham Spoken Business English Corpus (CANBEC) is a collection of spoken business English recorded in companies of all sizes, ranging from big multinational companies to small partnerships. Recordings include formal and informal meetings, presentations, conversations on the phone and in more informal settings.
- Written Business English reports, newspaper articles, proposals, tenders, journals and books.



Hong Kong Financial Services Corpus

Welcome to the <u>HKFSC</u> developed by the Research Centre for Professional Communication in English of the Hong Kong Polytechnic University. The HKFSC is a large collection of texts collected from the financial services sector of Hong Kong.

There are currently 7,341,937 words in the HKFSC.

- You can search for a word, e.g. bank, not, or a phrase, e.g. annual report, a lot of, and find examples of its use in its context.
- You can also search for an additional word in combination with your search word, e.g. equity (search word) and profit (additional word), or search phrase, e.g. financial institutions (search phrase) and banks (additional word).

| Enter search word or phrase | Additional word or phrase (optional) | SEARCH |
|-----------------------------|--------------------------------------|--------|
| | | |

Cambridge English Corpus

Cambridge Learner Corpus

The Cambridge Learner Corpus is the world's largest Learner Corpus.

It is made up from thousands of exam scripts written by students taking Cambridge ESOL English exams in countries around the world. It forms part of the Cambridge English Corpus. It has been built by Cambridge University Press and University of Cambridge ESOL Examinations.

The Cambridge Learner Corpus currently contains over **200,000 exam scripts** from students speaking 148 different languages living in **217 different countries or territories**. The Cambridge Learner Corpus is growing all the time.

The EnronSent Corpus

Will Styler University of Colorado - Boulder william.styler@colorado.edu

May 26th, 2011

~ 500,000 messages from 150 users (mostly senior management of Enron)

Contents

| 1 | Introduction | 2 |
|---|--|---|
| | 1.1 The Enron Email Corpus | 2 |
| | 1.2 Difficulties with the Enron Corpus for linguistic research | 2 |
| | 1.3 Goals of the EnronSent corpus | 3 |
| 2 | Creating the EnronSent Corpus | 4 |
| | 2.1 Retrieving and simplifying the raw emails | 4 |
| | 2.2 Cleaning the corpus | 4 |
| | 2.3 Formalizing the corpus | |
| | 2.4 EnronSubjects | |
| 3 | The EnronSent Corpus | 6 |
| | 3.1 Conclusion and Disclaimers | 6 |
| | 3.2 Final Corpus Statistics | 6 |
| | 3.3 Availability | |
| 4 | Acknowledgements | 7 |









ICFE International Certificate in Financial English

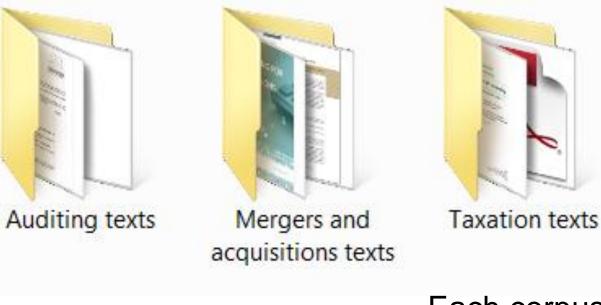


ICFE topics

Financial Reporting Company Financial Strategy **Risk Assessment and** Analysis Auditing Ethics and Professionalism Accounting Software Packages Assets and Company Valuations **Budgetary Processes Corporate Governance**

Cost and Management Accounting Environmental and Sustainability Issues Mergers and Acquisitions Taxation Banking Debt Recovery and Credit Policy Economic Conditions and Forecasts Insurance Pricing and Purchasing

Cambridge English Own corpora



Each corpus consists of 45-65 texts totalling approx 1.3 million words



ANALYSING CORPORA



Concordance lines

Use to find every occurance of a word / phrase Key Word In Context - KWIC

2 3 4 5 6 : chris.dambrosio@intcx.com I can take this mission. Please advise. Andy Zipper sonjay. 7 8 in other trading house are looking for a junior trader, please let me know. Deep in my heart I want to be 9 Okay, but you're still sleeping on the couch tonight.... Please see revised market assignments. Addititions 10 following note to the EnronOnline origination group: "Please attend an origination meeting on Tuesday, 11 It wil be Bob Shults. I will put him in contact with Joe. Please call Joe Robertson of enron Metals in NY to 12 stuff, but every long journey starts with a small step. Please let me your interest in pursuing this sort of 13 Thanks, Andy Zipper Vice President Enron Corp. Please review the spreadsheet, and look at Daily 14 need Jay involved. Kal will be finishing mine shortly. Please be prepared to do the 3 hole punch thing 20 15 16 17 stuff, but every long journey starts with a small step. Please let me your interest in pursuing this sort of © 18 your commencement date to December 31, 2001. (2) Please complete the first step by December 15th so

Thanks. Tomorrow ? PLEASE STOP REPLYING TO ALL USERS i sold 1. 1,000/d of apr/oct @ 3.02 for GD-Y-Gas Daily book. please put in that book. Thanks. Two things: 1). The below trade did not go into the GD-Y-Gas Daily book, please move it into the corect book. 2). I bot a Nov16 Mar3 @ 3.495 to hedge the above book. can you please put it in that book. Thanks. thnk u nothing for being offered by the IntercontinentalExchange. Please contact one of our following representatives to

Jeff. We'll let you know. Regards, Andy Sonjay, Please give me a call at your convienence. Thanks, -- Opening comments start promptly at 8:00 a.m., so please allow plenty of time to arrive at the Houstonian, casual. If you haven't turned in your presentation yet, please bring 20 copies to the meeting, 3-hole punched



Collocates – Please (L1)

| N | Word | L5 | L4 | L3 | L2 | L1 | Centre | R1 | R2 | R3 | R4 | R5 |
|----|-------------|-----|-------|-----|-----|-------|--------|-----|-------|-----|-------|-------|
| 1 | YOU | 836 | 2,045 | 395 | 400 | 3,687 | 0 | 10 | 222 | 790 | 967 | 3,364 |
| 2 | QUESTIONS | 124 | 219 | 308 | 52 | 1,867 | 0 | 0 | 11 | 85 | 169 | 261 |
| 3 | ERROR | 0 | 2 | 0 | 12 | 1,702 | 0 | 0 | 1 | 3 | 0 | 0 |
| 4 | PM | 79 | 154 | 171 | 428 | 1,238 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5 | RECIPIENT | 4 | 27 | 0 | 1 | 997 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | ATTACHED | 31 | 42 | 7 | 40 | 747 | 0 | 3 | 1,188 | 984 | 169 | 58 |
| 7 | AM | 75 | 135 | 125 | 288 | 662 | 0 | 0 | 2 | 5 | 31 | 24 |
| 8 | SO | 17 | 18 | 60 | 12 | 599 | 0 | 18 | 116 | 63 | 129 | 138 |
| 9 | ALSO | 14 | 9 | 58 | 18 | 481 | 0 | 139 | 11 | 12 | 24 | 14 |
| 10 | INFORMATION | 72 | 80 | 48 | 8 | 289 | 0 | 0 | 27 | 217 | 210 | 105 |
| 11 | AND | 154 | 167 | 306 | 383 | 288 | 0 | 8 | 1,208 | 755 | 1,732 | 1,673 |
| 12 | 20 | 78 | 79 | 68 | 122 | 224 | 0 | 21 | 32 | 79 | 45 | 40 |
| 13 | COM | 40 | 69 | 58 | 89 | 214 | 0 | 0 | 0 | 1 | 69 | 258 |
| 14 | COMMENTS | 18 | 32 | 138 | 14 | 201 | 0 | 1 | 80 | 207 | 201 | 211 |
| 15 | BUT | 20 | 6 | 29 | 5 | 200 | 0 | 1 | 2 | 1 | 19 | 11 |
| 16 | KAY | 12 | 20 | 49 | 96 | 192 | 0 | 0 | 7 | 18 | 17 | 15 |
| 17 | YES | 31 | 27 | 2 | 12 | 187 | 0 | 1 | 5 | 5 | 5 | 3 |
| 18 | APPROVAL | 0 | 4 | 18 | 30 | 174 | 0 | 4 | 21 | 26 | 61 | 31 |



Collocates – Please (R1)

| Ν | Word | L5 | L4 | L3 | L2 | L1 | Centre | R1 | R2 | R3 | R4 | R5 |
|----|---------|----|----|----|----|----|--------|-------|-----|-----|-------|-----|
| 1 | LET | 12 | 12 | 18 | 0 | 0 | 0 | 9,040 | 59 | 318 | 112 | 204 |
| 2 | CALL | 18 | 15 | 10 | 19 | 67 | 0 | 3,474 | 38 | 100 | 1,366 | 255 |
| 3 | CONTACT | 12 | 12 | 11 | 12 | 17 | 0 | 2,868 | 26 | 66 | 497 | 370 |
| 4 | REVIEW | 5 | 23 | 29 | 5 | 66 | 0 | 2,024 | 26 | 27 | 49 | 70 |
| 5 | ADVISE | 1 | 3 | 3 | 1 | 1 | 0 | 1,930 | 15 | 68 | 26 | 17 |
| 6 | SEND | 15 | 32 | 14 | 2 | 4 | 0 | 1,843 | 46 | 75 | 54 | 70 |
| 7 | SEE | 20 | 19 | 12 | 12 | 3 | 0 | 1,829 | 20 | 26 | 21 | 78 |
| 8 | FIND | 9 | 2 | 9 | 9 | 0 | 0 | 1,771 | 2 | 14 | 1 | 13 |
| 9 | NOTE | 14 | 2 | 7 | 9 | 24 | 0 | 1,406 | 51 | 101 | 47 | 11 |
| 10 | NOTIFY | 1 | 0 | 0 | 0 | 0 | 0 | 1,346 | 365 | 7 | 6 | 41 |
| 11 | FORWARD | 5 | 10 | 21 | 5 | 16 | 0 | 1,338 | 25 | 70 | 64 | 47 |
| 12 | GIVE | 9 | 3 | 8 | 0 | 0 | 0 | 1,311 | 14 | 44 | 96 | 110 |
| 13 | RESPOND | 3 | 12 | 4 | 8 | 5 | 0 | 1,290 | 1 | 20 | 10 | 24 |
| 14 | DO | 35 | 38 | 35 | 21 | 34 | 0 | 1,284 | 21 | 17 | 50 | 38 |
| 15 | FEEL | 2 | 2 | 2 | 2 | 0 | 0 | 1,213 | 7 | 5 | 4 | 15 |
| 16 | PROVIDE | 5 | 9 | 4 | 11 | 7 | 0 | 994 | 18 | 98 | 18 | 31 |
| 17 | TAKE | 23 | 8 | 7 | 5 | 5 | 0 | 749 | 13 | 8 | 10 | 9 |
| 18 | MAKE | 13 | 13 | 23 | 20 | 1 | 0 | 689 | 15 | 60 | 41 | 43 |



Cambridge English Frequency lists

Use to identify most common words / clusters

Most frequent four-word clusters

| | Auditing | Mergers and Acquisitions | Taxation |
|----|---|------------------------------|---------------------------------|
| 1 | THOSE CHARGED WITH GOVERNANCE | THE FAIR VALUE OF | IN THE CASE OF |
| 2 | THE AUDITOR S REPORT | FAIR VALUE OF THE | THE END OF THE |
| 3 | OF THE FINANCIAL STATEMENTS | IN A BUSINESS COMBINATION | IS DISPLAYED AS SHOWN |
| 4 | RISKS OF MATERIAL MISSTATEMENT | OF THE ACQUISITION DATE | AT THE RATE OF |
| 5 | OF THE AUDITOR GENERAL | AS OF THE ACQUISITION | THE CORPORATE INCOME TAX |
| 6 | IN THE FINANCIAL STATEMENTS | THE VALUE OF THE | AT A RATE OF |
| 7 | IN ACCORDANCE WITH THE | FOR THE BUSINESS COMBINATION | IN THE UNITED STATES |
| 8 | OF THE AUDITOR S | ACCOUNTING FOR THE BUSINESS | DETERMINATION OF TAXABLE INCOME |
| 9 | APPLICABLE FINANCIAL REPORTING FRAMEWORK | AS A RESULT OF | FOR THE PURPOSE OF |
| 10 | ON THE FINANCIAL STATEMENTS | IN THE ACCOUNTING FOR | ARE NOT SUBJECT TO |
| 11 | INTERNATIONAL STANDARDS ON AUDITING | CROSS BORDER M AS | SALES AND USE TAX |
| 12 | THE APPLICABLE FINANCIAL REPORTING | AT THE ACQUISITION DATE | ARE SUBJECT TO A |
| 13 | SUFFICIENT APPROPRIATE AUDIT EVIDENCE | FOR A BUSINESS COMBINATION | E RELATED PARTY TRANSACTIONS |
| 14 | OFFICE OF THE AUDITOR | IN THE CASE OF | ON THE BASIS OF |
| 15 | OF THE ENTITY S | OF THE BUSINESS COMBINATION | TREATY AND NON TREATY |
| 16 | THE RISKS OF MATERIAL | ACQUISITION DATE FAIR VALUE | TREATY WITHHOLDING TAX RATES |
| 17 | THE FINANCIAL STATEMENTS AND | OF MERGERS AND ACQUISITIONS | VALUE ADDED TAX VAT |
| 18 | FINANCIAL AUDIT MANUAL PAGE | CROSS BORDER M A | AT THE END OF |
| 19 | TRUE AND FAIR VIEW | ACCOUNTING FOR A BUSINESS | IN ACCORDANCE WITH THE |
| 20 | THE NATURE OF THE | ON THE OTHER HAND | FROM THE SALE OF |

Cambridge English Keywords

| Ν | Key word | Freq. | Keyness | |
|----|----------|-----------|--------------|---|
| 1 | # | 1,116,891 | 1,419,053.63 | l |
| 2 | ENRON | 56,066 | 231,764.22 | |
| 3 | PLEASE | 57,424 | 171,432.20 | |
| 4 | PM | 39,521 | 152,069.53 | |
| 5 | THANKS | 45,655 | 151,907.45 | |
| 6 | COM | 29,947 | 120,838.48 | |
| 7 | AM | 46,364 | 104,368.53 | |
| 8 | YOU | 192,087 | 83,287.21 | |
| 9 | I. | 211,018 | 68,662.66 | |
| 10 | EMAIL | 14,586 | 59,782.51 | |
| 11 | GAS | 21,684 | 58,662.09 | |
| 12 | WE | 108,983 | 57,718.57 | Т |
| 13 | ATTACHED | 18,119 | 55,564.65 | |
| 14 | ME | 64,020 | 53,108.02 | |
| 15 | E | 28,532 | 52,328.09 | |
| 16 | MAIL | 16,322 | 50,417.98 | |
| 17 | MESSAGE | 18,221 | 48,034.14 | |
| 18 | LET | 26,595 | 44,891.36 | |
| 19 | HOUSTON | 11,411 | 43,981.75 | |
| 20 | WILL | 87,921 | 43,638.70 | |

Jse to find words which are significantly more frequent in a corpus (when compared to another corpus)

Tells you what the corpus is about



Keywords

| Auditing | Mergers & acquisitions | Taxation |
|-------------|------------------------|-------------|
| # | # | # |
| AUDIT | S | TAX |
| OR | VALUE | INCOME |
| FINANCIAL | BUSINESS | TAXATION |
| AUDITOR | ACQUISITION | TAXES |
| S | ASSETS | S |
| STATEMENTS | MARKET | TAXABLE |
| MAY | FINANCIAL | NON |
| ENTITY | COMPANY | RATE |
| INFORMATION | М | WITHHOLDING |
| INTERNAL | BANK | CORPORATE |
| MANAGEMENT | MERGER | FOREIGN |
| REPORT | MERGERS | CAPITAL |
| CONTROL | TARGET | RESIDENT |

50 most frequent key words, taken from three ICFE topics, auditing, mergers and acquisitions, and taxation. Shaded boxes = two topics. Black boxes = three topics.

.

~ '





SAMPLE ACTIVITIES





Collocations

Use the words in the box to fill the gaps

transactions, engagement, evidence, statement, fraud

unauthorised, recurring, complex, routine, significant _____
 specific, compilation, group, assurance, audit ______
 further, documentary, additional, appropriate, audit ______
 group, consolidated, summary, income, financial ______
 likely, potential, alleged, possible, suspected ______





Collocations

Use the words in the box to fill the gaps

transactions, engagement, evidence, statement, fraud

unauthorised, recurring, complex, routine, significant <u>transactions</u>
 specific, compilation, group, assurance, audit <u>engagement</u>
 further, documentary, additional, appropriate, audit <u>evidence</u>
 group, consolidated, summary, income, financial <u>statement</u>
 likely, potential, alleged, possible, suspected <u>fraud</u>



Collocations

What word from the previous slide fits in all three gaps?

...when undertaking analytical procedures in a limited assurance _____ ...

...agreeing the terms of the compilation _____ ...

...during the course of an audit _____ ...



Collocations

What word from the previous slide fits in all three gaps?

...when undertaking analytical procedures in a limited assurance engagement...

...agreeing the terms of the compilation <u>engagement</u>... ...during the course of an audit <u>engagement</u> ...





Word formation

Use the words in the box to fill the gaps

acquire, acquired, acquiree, acquirer, acquisition, acquisitive

- 1 They are paying 8 million to _____ the stock.
- 2 We are talking about the net assets _____ by the buyer.
- 3 An _____ may obtain control of an _____ without transferring consideration.
- 4 The _____ date is the date the buyer obtains control of the target.
- 5 The level of ______ activities in the sector has increased.





Word formation

Use the words in the box to fill the gaps

acquire, acquired, acquiree, acquirer, acquisition, acquisitive

- 1 They are paying 8 million to <u>acquire</u> the stock.
- 2 We are talking about the net assets <u>acquired</u> by the buyer.
- 3 An <u>acquirer</u> may obtain control of an <u>acquiree</u> without transferring consideration.
- 4 The <u>acquisition</u> date is the date the buyer obtains control of the target.
- 5 The level of <u>acquisitive</u> activities in the sector has increased.





Semi-fixed expressions

Complete the phrase with as many options as you can.

At the end of the ____

audityaudit periodcfinancial periodryearcfinancial yearvmonthfsurvey phasesinterviewcannual audit cyclevfieldworkvcourseli

year day month century war first season decade week world line



CLOZE (GAP FILLS)

free Cloze test creator 🛛 🗙 🔪

- -> C 🗋 I.georges.online.fr/tools/cloze.html

CLOZE TEST

Paste your text below:

articles The directors are responsible for preparing a company's annual prepositions accounts that comply with the provisions of the Companies Act link words 1985 (the 'Act') and give a 'true and fair view' of the company's profit or loss for the year and the state of affairs at auxiliaries the balance sheet date. They are also responsible for the other wh-words parts of the annual report, principally the directors' report, the report on compliance with the Combined Code on Corporate Quantifiers + Governance, the directors' remuneration report and the modals operating and financial review or equivalent material. let me choose Text only
Interactive Clues No clues + -Submit clue:

Cloze test creator: http://l.georges.online.fr/tools/cloze.html

Text from:

Compliance Audit Handbook (2006) Department of Environment and Conservation NSW (Downloaded from:

http://www.environment.nsw.gov.au/resources/licensing/cahandbook0613.pdf)

every n

words



WORDLIST: The a the

____ directors are responsible for preparing _____ company's annual accounts that comply with provisions of Companies Act 1985 ("Act") and give "true and fair view" of _____ company's profit or loss for _____ year and _____ state of affairs at _____ balance sheet date. They are also responsible for _____ other parts of annual report, principally directors' report, report on compliance with ____ Combined Code on Corporate Governance, directors' remuneration report and _____ operating and financial review or equivalent material.



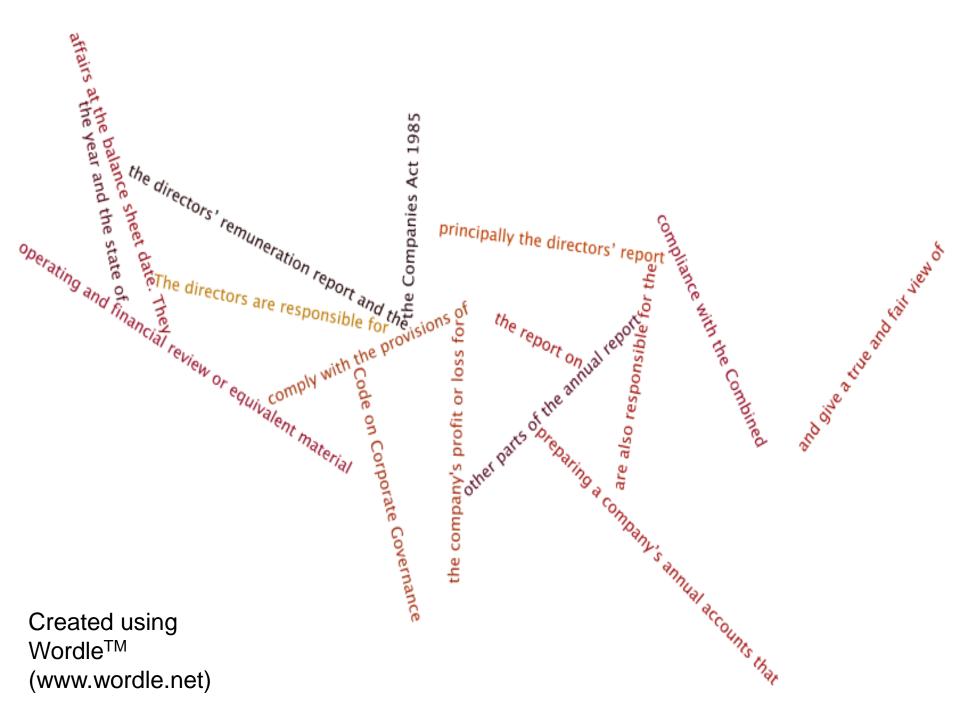
WORDLIST: at for of on with

The directors are responsible ____ preparing a company's annual accounts that comply ____ the provisions ____ the Companies Act 1985 (the "Act") and give a "true and fair view" the company's profit or loss the year and the state _____ affairs _____ the balance sheet date. They are also responsible _____ the other parts _____ the annual report, principally the directors' report, the report compliance _____ the Combined Code _____ Corporate Governance, the directors' remuneration report and the operating and financial review or equivalent material.



WORD CLOUDS

COMPANY Sstate accounts year ate preparing ^{gi} ate principally parts **resn** JCOUNE JO Corporate Compliance balance. Companies lG materia date uneration ivalent equ review affaire sheet Code Combined IOSS Created using Wordle™ (www.wordle.net)





EXPLORING LANGUAGE

Cambridge English Literal vs metaphorical



Look at these email extracts. Which ones use a literal meaning of "red", and which ones are metaphorical?

- So let me know if I still have any money coming to me or if I'm in the red. Take it easy, Kevin.
- The revisions are in red line (red and/or blue) per your request. Let me know any issues.
- Jeff will be leading our tasting of six red wines, each from a different winegrowing region.
- As you can see he is raising a major red flag in regards to our non-binding offer to XXX.
- Little wonder, therefore, that investors fear more red ink splashed over the balance sheets.
- Can you believe this? We have more red tape than Washington on this.
- I've already marked up w/ red pen, the HG + the Summary of terms sheet.



Cambridge ESOL E-Mail: info@cambridgeESOL.de <u>www.cambridgeESOL.de</u> www.cambridgeESOL.org



<u>www.twitter.com/cambridgeESOLDE</u> <u>www.facebook.com/cambridgeESOLDE</u> <u>www.cambridgeesolde.worldpress.com</u>

ALTE A ALTER AND A

