With hindsight, perhaps it should have looked fishy from the start that the British public had decided to take sides with the Sheriff of Nottingham.

Campaigners for a "Robin Hood tax" watched with alarm as thousands of votes pored into their website, rejecting their proposal for a levy on City wheeler-dealing, to raise money to fight poverty and climate change.

After a bit more investigation, though, the unlikely backlash against the rob-the-rich plan – almost 5,000 no votes against the Robin Hood tax within 20 minutes – turned out to emanate from just two computer servers, one of which was registered to the investment bank Goldman Sachs.

Supporters of a "Tobin tax", including churches, trade unions and charities, projected a giant slogan on the side of the Bank of England in Threadneedle Street earlier this week, urging the public to join the campaign for a small tax on every trade in financial markets, from share deals to foreign exchange transactions. They say this could raise tens of billions of pounds to tackle poverty and climate change abroad, and prevent savage public spending cuts at home as the government struggles to pay for the bank bailouts.

But being tarred with the same brush as the Sheriff of Nottingham seems to have been too much for at least one insider at the blue chip investment bank.

Between 3.41pm and 3.57pm yesterday, little more than 24 hours after the Robin Hood tax campaign's high-profile launch, supporters noticed a sudden spike in the number of people rejecting the plan in their online poll. More than 1,700 came from a Goldman-registered server, with the rest from what appeared to be a personal address. It was unclear whether the stunt involved an individual or a number of people. Goldman said: "We have just received this information, and we are investigating the matter fully."

A spokesman for the Robin Hood tax campaign said the "dubious" votes had been discounted. "It's great that public support for a tax on banks' financial transactions is making people in the City of London sit up and notice," he added.

Goldman has borne the brunt of much of the criticism about lavish bonuses in the financial sector, after its boss, Lloyd Blankfein, insisted the organisation was "doing God's work", and had not benefited from government support. Last month, Goldman responded to the public concern by promising to cap payouts to its London-based staff at £1m.

The idea of a Robin Hood tax is supported by a broad coalition, including the actor Bill Nighy, who has made a short video with film-maker Richard Curtis, backing the tax.

Hopes for a transaction tax hit a high last autumn after Gordon Brown signalled his support for the idea in a speech in Edinburgh, saying the "social contract" between banks and the public they are meant to serve had broken down.

Germany and France have also thrown their weight behind a transaction tax, one effect of which could be to dampen damaging speculation.
But since Barack Obama announced plans for a $90bn levy on Wall Street over the next decade, to help meet the costs of the banking bailouts, Downing Street has shifted towards the idea of taxing banks directly instead of slapping a charge on City transactions.

Tim Geithner, the US treasury secretary, indicated to the chancellor, Alistair Darling, at last week's G7 summit in Canada that America could support the idea of an international bank tax, and the prime minister has since said he hopes the principles of a worldwide levy can be agreed by the summer.